

**Iowa Department of Natural Resources  
Title V Operating Permit**

**Name of Permitted Facility:** Alcoa, Inc.  
**Facility Location:** 4879 State Street  
Riverdale, Iowa 52722  
**Air Quality Operating Permit Number:** 03-TV-025  
**Expiration Date:** August 25, 2008

**EIQ Number:** 92-0132  
**Facility File Number:** 82-01-002

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**Responsible Official**

**Name:** Mr. Mark J. Vrablec  
**Title:** Director of Manufacturing Davenport Works  
**Mailing Address:** P.O. Box 3567  
Bettendorf, Iowa 52808  
**Phone #:** 563-459-2287

**Permit Contact Person for the Facility**

**Name:** Mr. Wayne H. Jochmann  
**Title:** Environmental Specialist  
**Mailing Address:** P.O. Box 3567  
Bettendorf, Iowa 52808  
**Phone #:** 563-459-2904

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

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Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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## Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CM.....	cold mill
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
gr./dscf.....	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
HCl.....	for the purposes of 40 CFR 63 Subpart RRR, emissions of hydrogen chloride that serve as a surrogate measure of the total emissions of the HAPs hydrogen chloride, hydrogen fluoride and chlorine
hp.....	horsepower
hp-hr.....	horsepower hour
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NSPS.....	new source performance standard
O & M.....	operation and maintenance
OM & M.....	operation, maintenance, and monitoring
ppmv.....	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu.....	pounds per million British thermal units
PAHTS.....	plate and heat treated sheet
SAPU.....	secondary aluminum processing unit
scfm.....	standard cubic feet per minute
TEQ.....	for the purposes of 40 CFR 63 Subpart RRR, the international method of Expressing toxicity equivalents for dioxins and furans as defined in "Interim Procedures for Estimation Risk Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans and 1989 Update" (EPA-625/3-89-016)
THC.....	for the purposes of 40 CFR 63 Subpart RRR, total hydrocarbon emissions that also serve as a surrogate for the emissions of organic HAP compounds
TPY.....	Tons per year
USEPA.....	United States Environmental Protection Agency

## **Pollutants**

PM.....	particulate matter
PM <sub>10</sub> .....	particulate matter ten microns or less in diameter
SO <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: Alcoa, Inc.

Permit Number: 03-TV-025

Facility Description: Aluminum Sheet, Plate, and Foil (SIC 3353)

## Equipment List

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
S-152	AFRNCR08	Air Annealing Furnace #8
S-151	AFRNCR09	Air Annealing Furnace #9
S-150	AFRNCR10	Air Annealing Furnace #10
S-249	AFRNLR02	#2 F.M. Annealing Furnace
S-250	AFRNLR03	#3 F.M. Annealing Furnace
S-251	AFRNLR04	#4 F.M. Annealing Furnace
S-252	AFRNLR05	#5 F.M. Annealing Furnace
S-254	AFRNLR06	#6 F.M. Annealing Furnace
S-247	AFRNLR07	#7 F.M. Annealing Furnace
S-246	AFRNLR08	#8 F.M. Annealing Furnace
S-281	AFRNLR09	#9 F.M. Annealing Furnace
S-282	AFRNLR09	#9 F.M. Annealing Furnace
S-187	CFRN01	CAA Furnace #1
S-186	CFRN02	CAA Furnace #2
S-185	CFRN03	CAA Furnace #3
S-149	CFRN11	CAA Furnace #11
S-148	CFRN12	CAA Furnace #12
S-142	CFRN18	CAA Furnace #18
S-141	CFRN19	CAA Furnace #19
S-140	CFRN20	CAA Furnace #20
S-139	CFRN21	CAA Furnace #21
S-138	CFRN25	CAA Furnace #25
S-137	CFRN26	CAA Furnace #26
S-136	CFRN27	CAA Furnace #27
S-135	CFRN28	CAA Furnace #28
S-134	CFRN29	CAA Furnace #29
S-157	CFRN50	CAA Furnace #50
S-157	CFRN51	CAA Furnace #51
S-156	CFRN52	CAA Furnace #52
S-155	CFRN53	CAA Furnace #53
S-154	CFRN54	CAA Furnace #54

<b>Emission Point Number</b>	<b>Associated Emission Unit Number(s)</b>	<b>Associated Emission Unit Description</b>
S-287	CMIL01	#1 Cold Mill
S-165	CMIL03	#3 Cold Mill
S-169	CMIL07	#7 Cold Mill
S-158	CSTD60	60" Cont Strech Wash Unit
S-175	CTLL02	#1 & #2 – 84" Coil Finish Wash Line
S-336	DFRN01	Pig Drying Furnace
S-273	FILT02	#2 In-Line Fluxer Filter Box
S-285	FILT03	#3 In-Line Fluxer Filter Box
S-292	FILT04	#4 In-Line Fluxer Filter Box
S-044	FILT14	#14 In-Line Fluxer Filter Box
S-341	FILT17	#17 In-Line Fluxer Filter Box
S-342	FILT18	#18 In-Line Fluxer Filter Box
S-147	GFRN13	#13 Aging Furnace
S-146	GFRN14	#14 Aging Furnace
S-145	GFRN15	#15 Aging Furnace
S-144	GFRN16	#16 Aging Furnace
S-143	GFRN17	#17 Aging Furnace
S-125	GFRN31	60" Ager #31
S-126	GFRN32	210" Ager #32
S-272	HFRN02	#2 Holding Furnace
S-284	HFRN03	#3 Holding Furnace
S-291	HFRN04	#4 Holding Furnace
S-043	HFRN14	#14 Holding Furnace
S-047	HFRN15	#15 Holding Furnace
S-047	FILT15	#15 In-Line Fluxer Filter Box
S-050	HFRN16	#16 Holding Furnace
S-050	FILT16	#16 In-Line Fluxer Filter Box
S-052	HFRN17	#17 Holding Furnace
S-057	HFRN18	#18 Holding Furnace
S-288	HMIL10	100" 5 Stand Hot Mill
S-289	HMIL10	100" 5 Stand Hot Mill
S-119	HMIL22	220" Hot Mill Line
S-120	HMIL22	220" Hot Mill Line
S-071	HMILPH	PAHTS 144" Taper Mill

<b>Emission Point Number</b>	<b>Associated Emission Unit Number(s)</b>	<b>Associated Emission Unit Description</b>
S-307	LDRY01	Litho Line Dryer
S-314	LHLT05	Lime Storage for Blowdown Treatment
S-201	LMIL01	#1 Light Rolling Mill
S-203	LMIL02	#2 Light Rolling Mill
S-306	LWSH01	Litho Line Wash Unit
S-271	MFRN02	#2 Melting Furnace
S-283	MFRN03	#3 Melting Furnace
S-290	MFRN04	#4 Melting Furnace
S-040	MFRN13	#13 Melting Furnace
S-045	MFRN14	#14 Melting Furnace
S-048	MFRN15	#15 Melting Furnace
S-049	MFRN16	#16 Melting Furnace
S-053	MFRN17	#17 Melting Furnace
S-056	MFRN18	#18 Melting Furnace
S-097	MMCH03	#3 Mill Machine
S-098	MMCH03	#3 Mill Machine
S-300	OCOM01	Ingot Plant Standby Diesel Generator
S-315	OCOM02	MIS Standby Diesel Engine/Generator
S-319	OCOM06	High Pressure Water System Pump Engine
S-320	OCOM07	High Pressure Water System Pump Engine
S-321	OCOM08	Low Pressure Water System Pump Engine
S-335	OCOM10	High Pressure Water System Pump Engine
S-093	PFRN01	Preheat Furnace #1
S-095	PFRN01	Preheat Furnace #1
S-094	PFRN02	Preheat Furnace #2
S-278	PFRN12	Preheat Furnace #12
S-279	PFRN12	Preheat Furnace #12
S-275	PFRN13	Preheat Furnace #13
S-276	PFRN13	Preheat Furnace #13
S-115	PFRN16	Preheat Furnace #16
S-116	PFRN16	Preheat Furnace #16
S-113	PFRN17	Preheat Furnace #17
S-114	PFRN17	Preheat Furnace #17
S-111	PFRN18	Preheat Furnace #18
S-112	PFRN18	Preheat Furnace #18
S-109	PFRN19	Preheat Furnace #19

<b>Emission Point Number</b>	<b>Associated Emission Unit Number(s)</b>	<b>Associated Emission Unit Description</b>
S-110	PFRN19	Preheat Furnace #19
S-107	PFRN20	Preheat Furnace #20
S-108	PFRN20	Preheat Furnace #20
S-105	PFRN21	Preheat Furnace #21
S-106	PFRN21	Preheat Furnace #21
S-103	PFRN22	Preheat Furnace #22
S-104	PFRN22	Preheat Furnace #22
S-102	PFRN23	Preheat Furnace #23
S-100	PFRN24	Preheat Furnace #24
S-101	PFRN24	Preheat Furnace #24
S-294	PFRN25	Preheat Furnace #25
S-295	PFRN25	Preheat Furnace #25
S-296	PFRN26	Preheat Furnace #26
S-297	PFRN26	Preheat Furnace #26
S-325	PFRN27	Preheat Furnace #27
S-326	PFRN27	Preheat Furnace #27
S-118	PFRN14	Preheat Furnace #14
S-117	PFRN15	Preheat Furnace #15
S-131	PNTS01	Maintenance Paint Booth
S-007	RFRN01	Reheat Furnace #1
S-011	RFRN05	Reheat Furnace #5
S-012	RFRN06	Reheat Furnace #6
S-013	RFRN07	Reheat Furnace #7
S-014	RFRN08	Reheat Furnace #8
S-015	RFRN09	Reheat Furnace #9
S-016	RFRN10	Reheat Furnace #10
S-017	RFRN11	Reheat Furnace #11
S-018	RFRN12	Reheat Furnace #12
S-019	RFRN13	Reheat Furnace #13
S-020	RFRN14	Reheat Furnace #14
S-021	RFRN15	Reheat Furnace #15
S-074	RFRN20	Reheat Furnace #20
S-073	RFRN21	Reheat Furnace #21
S-072	RFRN22	Reheat Furnace #22
S-070	RFRN24	Reheat Furnace #24
HR1	ROAD01	Haul Road/Trucks
HR1	ROAD02	Haul Road/Trucks

<b>Emission Point Number</b>	<b>Associated Emission Unit Number(s)</b>	<b>Associated Emission Unit Description</b>
S-099	SCLP03	#3 Scalper
S-261	SCLP04	#4 Scalper
S-262	SCLP04	#4 Scalper
S-298	SHLT01	Scrap Conveyor System Exhaust
S-338	SKIM	Skim House (Ingot Plant)
S-068	TFRN10	#10 Heat Treat Furnace
S-069	TFRN11	#11 Heat Treat Furnace
S-259	TFRN12	#12 Heat Treat Furnace
S-160	TFRN50	50" Continuous Heat Treat Line
S-162	TFRN50	50" Continuous Heat Treat Line
S-172	TFRN86	86" Continuous Heat Treat Line
S-176	TFRN86	86" Continuous Heat Treat Line
S-177	TFRN86	86" Continuous Heat Treat Line
S-178	TFRN86	86" Continuous Heat Treat Line
S-179	TFRN86	86" Continuous Heat Treat Line
S-180	TFRN86	86" Continuous Heat Treat Line
S-327	TFRN14	#14 Heat Treat Furnace
S-328	TFRN14	#14 Heat Treat Furnace
S-329	TFRN14	#14 Heat Treat Furnace
S-330	TFRN14	#14 Heat Treat Furnace
S-333	TFRN15	#15 Heat Treat Furnace
S-340	TFRN16	#16 Heat Treat Furnace
T-044	TNKA0044	Storage Tank (100,000 gallons) Rolling Emulsion
T-129	TNKA0129	Storage Tank (402,369 gallons) Fuel Oil
T-130	TNKA0130	Storage Tank (402,369 gallons) Used Oil
T-141	TNKA0141	Storage Tank (2,000 gallons) Gasoline
T-142	TNKA0142	Storage Tank (2,000 gallons) Diesel Fuel
T-223	TNKA0223	Storage Tank (36,000 gallons) Oily Waste Water
T-080	TNKA0080	Storage Tank (30,000 gallons) Used Oil
T-102	TNKA0102	Storage Tank (30,000 gallons) Used Oil
T-120	TNKA0120	Storage Tank (12,000 gallons) Rolling Lubricant
T-121	TNKA0121	Storage Tank (12,000 gallons) Rolling Lubricant
T-122	TNKA0122	Storage Tank (12,000 gallons) Rolling Lubricant
T-123	TNKA0123	Storage Tank (12,000 gallons) Rolling Lubricant
T-124	TNKA0124	Storage Tank (12,000 gallons) Rolling Lubricant
T-125	TNKA0125	Storage Tank (15,000 gallons) Rolling Lubricant

<b>Emission Point Number</b>	<b>Associated Emission Unit Number(s)</b>	<b>Associated Emission Unit Description</b>
T-126	TNKA0126	Storage Tank (15,000 gallons) Rolling Lubricant
T-127	TNKA0127	Storage Tank (15,000 gallons) Rolling Lubricant
T-176	TNKA0176	Storage Tank (15,200 gallons) UF Concentrate
T-177	TNKA0177	Storage Tank (15,200 gallons) Fuel Oil
T-182	TNKA0182	Storage Tank (15,200 gallons) Fuel Oil
T-228	TNKA0228	Storage Tank (12,000 gallons) Rolling Lubricant
T-229	TNKA0229	Storage Tank (12,000 gallons) Rolling Lubricant
S-323	TTST12	Truck Maintenance Vehicle Engine Exhaust
S-163	WWRK01	Sawdust Collector
S-133	WWRK02	Sawdust Collector
FUG-GP	AFRNCR08	Air Annealing Furnace #8
	AFRNCR09	Air Annealing Furnace #9
	AFRNCR10	Air Annealing Furnace #10
	CFRN01	CAA Furnace #1
	CFRN02	CAA Furnace #2
	CFRN03	CAA Furnace #3
	CFRN11	CAA Furnace #11
	CFRN12	CAA Furnace #12
	CFRN18	CAA Furnace #18
	CFRN19	CAA Furnace #19
	CFRN20	CAA Furnace #20
	CFRN21	CAA Furnace #21
	CFRN25	CAA Furnace #25
	CFRN26	CAA Furnace #26
	CFRN27	CAA Furnace #27
	CFRN28	CAA Furnace #28
	CFRN29	CAA Furnace #29
	CFRN50	CAA Furnace #50
	CFRN51	CAA Furnace #51
	CFRN52	CAA Furnace #52
	CFRN53	CAA Furnace #53
	CFRN54	CAA Furnace #54
	CMIL01	#1 Cold Mill
	CMIL03	#3 Cold Mill
	CMIL07	#7 Cold Mill
	CSTD60	Fugitive Losses from 60" Line
	CTLL02	#1 & #2 – 84" Coil Finish Wash Line

<b>Emission Point Number</b>	<b>Associated Emission Unit Number(s)</b>	<b>Associated Emission Unit Description</b>
<i>FUG-GP (cont.)</i>	FUG_GP_V1	Stores/Off Site Consumption Fugitives
	FUG_GP_V2	Stores/Off Site Consumption Fugitives
	FUG_GP_V3	Stores/Off Site Consumption Fugitives
	OILH01	#1 Cold Mill Oil House
	OILH03	#3 Cold Mill Oil House
	OILH07	#7 Cold Mill Oil House
	TFRNE07	#7 Heat Treat (electric)
	TFRN14	#14 Heat Treat Furnace
FUG-B7XX	AFRNLR02	#2 F.M. Annealing Furnace
	AFRNLR03	#3 F.M. Annealing Furnace
	AFRNLR04	#4 F.M. Annealing Furnace
	AFRNLR05	#5 F.M. Annealing Furnace
	AFRNLR06	#6 F.M. Annealing Furnace
	AFRNLR07	#7 F.M. Annealing Furnace
	AFRNLR08	#8 F.M. Annealing Furnace
	AFRNLR09	#9 F.M. Annealing Furnace
	LMIL01	#1 Light Rolling Mill
	LMIL02	#2 Light Rolling Mill
FUG-HL	HMIL10	100" 5 Stand Hot Mill
	HMIL14	144" 5 Stand Hot Mill
	HMIL16	160" Hot Mill
	HMIL22	220" Hot Mill Line
	HMILPH	PAHTS 144" Taper Mill
	PFRN01	Preheat Furnace #1
	PFRN02	Preheat Furnace #2
	PFRN12	Preheat Furnace #12
	PFRN13	Preheat Furnace #13
	PFRN16	Preheat Furnace #16
	PFRN17	Preheat Furnace #17
	PFRN18	Preheat Furnace #18
	PFRN19	Preheat Furnace #19
	PFRN20	Preheat Furnace #20
	PFRN21	Preheat Furnace #21
	PFRN22	Preheat Furnace #22
	PFRN23	Preheat Furnace #23
	PFRN24	Preheat Furnace #24
	PFRN25	Preheat Furnace #25
	PFRN26	Preheat Furnace #26
	PFRN27	Preheat Furnace #27

<b>Emission Point Number</b>	<b>Associated Emission Unit Number(s)</b>	<b>Associated Emission Unit Description</b>
FUG-IP	FILT14	#14 In-Line Fluxer Filter Box
	FILT15	#15 In-Line Fluxer Filter Box
	FILT16	#16 In-Line Fluxer Filter Box

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### Insignificant Equipment List

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<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
AIRSTRIP	Air Stripper
FUG_IP_CH	East and West Crucible Heating Stations
FUG_IP_SP	Skim Pan Heating Station
OCOM03	Security Communications Backup Engine/Generator
OCOM05	Building 808 Phone Backup Engine/Generator
OCOM09	Ingot Plant Phone Backup Engine/Generator
PW – Roll	Parts Washer – East Roll Shop
PW – Truck	Parts Washer – Truck
TNKA0018	Storage Tank (13,000 gallons) Rolling Oil
TNKA0019	Storage Tank (13,000 gallons) Rolling Oil
TNKA0026	Storage Tank (11,000 gallons) Rolling Oil
TNKA0027	Storage Tank (7,000 gallons) Rolling Oil
TNKA0028	Storage Tank (20,000 gallons) Rolling Oil
TNKA0029	Storage Tank (15,000 gallons) Rolling Oil
TNKA0041	Storage Tank (28,000 gallons) Rolling Emulsion
TNKA0042	Storage Tank (63,000 gallons) Rolling Emulsion
TNKA0043	Storage Tank (740 gallons) Rolling Emulsion
TNKA0044	Storage Tank (100,000 gallons) Rolling Emulsion
TNKA0066	Storage Tank (3,500 gallons) Rolling Oil
TNKA0068	Storage Tank (250,000 gallons) Used Oil
TNKA0069	Storage Tank (250,000 gallons) Used Oil
TNKA0070	Storage Tank (250,000 gallons) Used Oil
TNKA0076	Storage Tank (10,000 gallons) Kerosene
TNKA0079	Storage Tank (15,000 gallons) Used Oil
TNKA0093	Storage Tank (10,000 gallons) Caster Oil
TNKA0094	Storage Tank (3,000 gallons) Rolling Oil
TNKA0101	Storage Tank (1,000 gallons) Diesel Fuel

<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
TNKA0103	Storage Tank (15,000 gallons) Used Oil
TNKA0104	Storage Tank (15,000 gallons) Used Oil
TNKA0144	Storage Tank (20,000 gallons) Reclaimed Oil
TNKA0145	Storage Tank (20,000 gallons) New Oil
TNKA0146	Storage Tank (15,000 gallons) 1 CM Scrap
TNKA0147	Storage Tank (8,000 gallons) 4 CM Scrap
TNKA0148	Storage Tank (11,000 gallons) 3 CM Scrap
TNKA0209	Storage Tank (2,000 gallons) Diesel Fuel
TNKA0210	Storage Tank (2,000 gallons) Diesel Fuel
TNKA0230	Storage Tank (1,000 gallons) Waste Oil
TNKA0232	Storage Tank (8,000 gallons) Rolling Lubricant
TNKA0233	Storage Tank (500 gallons) Diesel Fuel
TNKA0235	Storage Tank (2,000 gallons) Diesel Fuel
TNKA0243	Storage Tank (500 gallons) Diesel Fuel
TNKA0249	Storage Tank (6,000 gallons) Rolling Oil
TNKA0251	Storage Tank (6,000 gallons) Rolling Oil
TNKA0253	Storage Tank (4,500 gallons) Rolling Oil
TNKA0254	Storage Tank (4,500 gallons) Rolling Oil
TNKA0255	Storage Tank (4,500 gallons) Rolling Oil
TNKA0256	Storage Tank (4,500 gallons) Rolling Oil
TNKA0300	Storage Tank (60,000 gallons) Rolling Lubricant
TNKA0301	Storage Tank (60,000 gallons) Rolling Lubricant
TNKA0303	Storage Tank (60,000 gallons) Rolling Lubricant
TNKA0304	Storage Tank (60,000 gallons) Rolling Lubricant
TNKA0307	Storage Tank (500 gallons) Separator Oil
TNKA0312	Storage Tank (2,000 gallons) Diesel Fuel
TNKA0323	Storage Tank (15,000 gallons) Rolling Lubricant
TNKA0324	Storage Tank (15,000 gallons) Rolling Lubricant
TNKA0325	Storage Tank (15,000 gallons) Rolling Lubricant

## II. Plant-Wide Conditions

Facility Name: Alcoa, Inc.  
Permit Number: 03-TV-025

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

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### Permit Duration

The term of this permit is: 5 years  
Commencing on: August 26, 2003  
Ending on: August 25, 2008

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

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### Emission Limits

*Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant::*

Opacity (visible emissions): 40% opacity  
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO<sub>2</sub>): 500 parts per million by volume  
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)<sup>1</sup>:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

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<sup>1</sup> This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

Particulate Matter (federally enforceable)<sup>2</sup>:

The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.

Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

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**Compliance Plan**

*The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.*

Unless otherwise noted in Section III of this permit, Alcoa, Inc. is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Alcoa, Inc. shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

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<sup>2</sup> This is the current language in the Iowa SIP, and is enforceable by EPA.

**Section 112(j) of the Clean Air Act (MACT Hammer)**

On May 20, 2002, Alcoa, Inc. submitted a Part 1 MACT application to IDNR, indicating that the facility may be subject to the MACT standard for Industrial/Commercial/Institutional Boilers & Process Heaters, 40 CFR 63 Subpart DDDDD, when it is promulgated. Alcoa, Inc. must submit a Part 2 MACT application to IDNR by the deadline specified in 40 CFR 63.52(e), if 40 CFR 63 Subpart DDDDD has not been promulgated by that date.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

### III. Emission Point-Specific Conditions

Facility Name: Alcoa, Inc.  
Permit Number: **03-TV-025**

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#### Emission Point ID Numbers: Annealing Furnaces (Combustion)

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##### Applicable Requirements

*EP = Emission Point*

*EU = Emission Unit*

EP	EU	EU Description	Raw Material	Rated Capacity
S-152	AFRNCR08	Air Annealing Furnace #8	Natural Gas	0.005 MMcf/hr
S-151	AFRNCR09	Air Annealing Furnace #9	Natural Gas	0.005 MMcf/hr
S-150	AFRNCR10	Air Annealing Furnace #10	Natural Gas	0.005 MMcf/hr
S-249	AFRNLR02	#2 F.M. Annealing Furnace	Natural Gas	0.002 MMcf/hr
S-250	AFRNLR03	#3 F.M. Annealing Furnace	Natural Gas	0.002 MMcf/hr
S-251	AFRNLR04	#4 F.M. Annealing Furnace	Natural Gas	0.002 MMcf/hr
S-252	AFRNLR05	#5 F.M. Annealing Furnace	Natural Gas	0.002 MMcf/hr
S-254	AFRNLR06	#6 F.M. Annealing Furnace	Natural Gas	0.003 MMcf/hr
S-247	AFRNLR07	#7 F.M. Annealing Furnace	Natural Gas	0.003 MMcf/hr
S-246	AFRNLR08	#8 F.M. Annealing Furnace	Natural Gas	0.003 MMcf/hr
S-281	AFRNLR09	#9 F.M. Annealing Furnace	Natural Gas	0.004 MMcf/hr
S-282	AFRNLR09	#9 F.M. Annealing Furnace	Natural Gas	0.004 MMcf/hr

##### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: CAA Furnaces (Combustion)

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### Applicable Requirements

EP = Emission Point

EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
S-187	CFRN01	CAA Furnace #1	Natural Gas	0.005 MMcf/hr
S-186	CFRN02	CAA Furnace #2	Natural Gas	0.005 MMcf/hr
S-185	CFRN03	CAA Furnace #3	Natural Gas	0.005 MMcf/hr
S-149	CFRN11	CAA Furnace #11	Natural Gas	0.005 MMcf/hr
S-148	CFRN12	CAA Furnace #12	Natural Gas	0.005 MMcf/hr
S-142	CFRN18	CAA Furnace #18	Natural Gas	0.009 MMcf/hr
S-141	CFRN19	CAA Furnace #19	Natural Gas	0.009 MMcf/hr
S-140	CFRN20	CAA Furnace #20	Natural Gas	0.009 MMcf/hr
S-139	CFRN21	CAA Furnace #21	Natural Gas	0.009 MMcf/hr
S-138	CFRN25	CAA Furnace #25	Natural Gas	0.013 MMcf/hr
S-137	CFRN26	CAA Furnace #26	Natural Gas	0.013 MMcf/hr
S-136	CFRN27	CAA Furnace #27	Natural Gas	0.007 MMcf/hr
S-135	CFRN28	CAA Furnace #28	Natural Gas	0.012 MMcf/hr
S-134	CFRN29	CAA Furnace #29	Natural Gas	0.010 MMcf/hr
S-157	CFRN50	CAA Furnace #50	Natural Gas	0.002 MMcf/hr
	CFRN51	CAA Furnace #51	Natural Gas	0.002 MMcf/hr
S-156	CFRN52	CAA Furnace #52	Natural Gas	0.010 MMcf/hr
S-155	CFRN53	CAA Furnace #53	Natural Gas	0.010 MMcf/hr
S-154	CFRN54	CAA Furnace #54	Natural Gas	0.002 MMcf/hr

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-287**

### Associated Equipment

Associated Emission Unit ID Numbers: CMIL01

Emissions Control Equipment ID Number: CMIL0287

Emissions Control Equipment Description: Centrifugal Mist Eliminator

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: CMIL01

Emission Unit Description: #1 Cold Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limits(s): 44.85 lb./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 51.5 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 89-A-032

567 IAC 23.3(2)"a"

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-165**

### Associated Equipment

Associated Emission Unit ID Numbers: CMIL03

Emissions Control Equipment ID Number: CMIL0165

Emissions Control Equipment Description: Demister

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: CMIL03

Emission Unit Description: #3 Cold Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s) 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-169**

### Associated Equipment

Associated Emission Unit ID Numbers: CMIL07

Emissions Control Equipment ID Number: CMIL0169

Emissions Control Equipment Description: Demister

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: CMIL07

Emission Unit Description: #7 Cold Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s) 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-158**

### Associated Equipment

Associated Emission Unit ID Numbers: CSTD60

Emissions Control Equipment ID Number: CSTD0158

Emissions Control Equipment Description: Carbon Adsorber

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: CSTD60

Emission Unit Description: 60" Cont Stretch Wash Unit

Raw Material/Fuel: Perchloroethylene

Rated Capacity: 13.17 gallons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No emission limits at this time.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart T - National Emission Standards for Halogenated Solvent Cleaning - 567 IAC 23.1(4)"t". Excerpts are shown below:

*(Note: Citation numbering is consistent with 40 CFR Part 63.)*

#### **Sec. 63.464 Alternative standards.**

(a) As an alternative to meeting the requirements in Sec. 63.463, each owner or operator of a batch vapor or in-line solvent cleaning machine can elect to comply with the requirements of Sec. 63.464. An owner or operator of a solvent cleaning machine who elects to comply with Sec. 63.464 shall comply with the requirements specified in either paragraph (a)(1) or (a)(2) of this section.

(1) If the cleaning machine has a solvent/air interface, as defined in Sec. 63.461, the owner or operator shall comply with the requirements specified in paragraphs (a)(1)(i) and (a)(1)(ii) of this section.

(i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

(ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the applicable emission limit presented in table 5 of this subpart as determined using the procedures in Sec. 63.465(b) and (c).

Table 5--Emission Limits for Batch Vapor and In-Line Solvent Cleaning Machines With a Solvent/Air Interface

Solvent cleaning machine	3-month rolling average monthly emission limit kilograms/m <sup>2</sup> /month
Existing in-line solvent cleaning machines.....	153*

\*According to Alcoa, the solvent air interface area on this unit is 130 ft<sup>2</sup>, which corresponds to a limit of 300 gallons/month.

#### Sec. 63.465 Test methods.

(c) Except as provided in paragraphs (f) and (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with Sec. 63.464 shall, on the first operating day of the month, comply with the requirements specified in paragraphs (c)(1) through (3) of this section.

- (1) Using the records of all solvent additions and deletions for the previous monthly reporting period required under Sec. 63.464(a), determine solvent emissions ( $E_i$ ) using equation 2 for cleaning machines with a solvent/air interface and equation 3 for cleaning machines without a solvent/air interface:

$$E_i = (SA_i - LSR_i - SSR_i)/AREA_i \quad (2)$$

where:

$E_i$  = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per square meter of solvent/air interface area per month).

$E_n$  = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$SA_i$  = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$LSR_i$  = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$SSR_i$  = the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in paragraph (c)(2) of this section, during the most recent monthly reporting period  $i$ , (kilograms of solvent per month).

$AREA_i$  = the solvent/air interface area of the solvent cleaning machine (square meters).

- (2) Determine  $SSR_i$  using the method specified in paragraph (c)(2)(i) or (c)(2)(ii) of this section.
  - (i) From tests conducted using EPA reference method 25d.
  - (ii) By engineering calculations included in the compliance report.
- (3) Determine the monthly rolling average, EA, for the 3-month period ending with the most recent reporting period using equation 4 for cleaning machines with a

solvent/air interface or equation 5 for cleaning machines without a solvent/air interface:

$$EA_i = \frac{\sum_{j=1}^3 E_j}{3} \quad (5)$$

Where:

- EA<sub>i</sub> = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods, (kilograms of solvent per square meter of solvent/air interface area per month).
- EA<sub>n</sub> = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per month).
- E<sub>i</sub> = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area).
- E<sub>n</sub> = halogenated HAP solvent emissions for each month (j) for the most recent 3 monthly reporting periods (kilograms of solvent per month).
- j=1 = the most recent monthly reporting period.
- j=2 = the monthly reporting period immediately prior to j=1.
- j=3 = the monthly reporting period immediately prior to j=2.

#### **Sec. 63.466 Monitoring procedures.**

(g) Each owner or operator using a control device listed in paragraphs (a) through (e) of this section can use alternative monitoring procedures approved by the Administrator.

##### Alternative Monitoring Method for the 60" Line

*The Alternative Monitoring Method for the 60" Line listed below was approved by Donald C. Toensing, Chief, Air Permitting and Compliance Branch, Region 7 EPA, on January 5, 2000.*

1. At the end of each month the carbon adsorption system will be regenerated since the carbon system can hold a large amount of solvent.
2. The solvent used by the cleaning machine, SA, would be equal to the amount of halogenated HAP liquid solvent added to the solvent cleaning machine plus the change in total solvent in the system during the monthly reporting period. The change in the total solvent in the system is equal to SIN<sub>i-1</sub> – SIN<sub>i</sub>.
3. The total solvent in the system, SIN, is the sum of the following in kilograms:
  - The solvent in the wash tank,
  - The solvent in the clean tank,
  - The solvent in the dirty tank, and
  - The solvent in the still.
4. When possible, the tanks will be filled to their full levels.

5. The line will be stopped to let the tank levels stabilize before dipping each tank to measure the amount of solvent in each tank. Each tank will be dipped on the first work day of each month and the amount of solvent in the tank calculated in kilograms.
6. The still's boiling temperature will be measured on the first work day of each month. The amount of halogenated HAP solvent in the still will be calculated by using the boiling temperature of the material in the still and the chart of percent oil by volume versus boiling temperature<sup>1</sup> provided to EPA in Wayne Jochmann's (Alcoa) December 21, 1999 e-mail. The percent by volume of solvent will be calculated by subtracting the percent by volume of oil from 100. The amount of halogenated HAP liquid solvent in the still will be calculated by multiplying this volume percent by the volume of material in the still and dividing by 100. This volume will then be converted to kilograms by using a specific gravity of 1.615 kilograms per liter.

The SA will then be used in equation (2) of 40 CFR 63.465. Also, the amount of halogenated HAP liquid solvent removed from the cleaning system as liquid, LSR, and in solid waste, SSR, will be determined as specified in equation (2) of 40 CFR 63.465.

#### **Sec. 63.467 Recordkeeping requirements.**

(c) Except as provided in paragraph (e) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Sec. 63.464 shall maintain records specified in paragraphs (c)(1) through (3) of this section either in electronic or written form for a period of 5 years.

- (1) The dates and amounts of solvent that are added to the solvent cleaning machine.
- (2) The solvent composition of wastes removed from cleaning machines as determined using the procedure described in Sec. 63.465(c)(2).
- (3) Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

#### **Sec. 63.468 Reporting requirements.**

(e) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Sec. 63.464 shall submit to the Administrator an initial statement of compliance for each solvent cleaning machine. For existing sources, this report shall be submitted to the Administrator no later than 150 days after the compliance date specified in Sec. 63.460(d). For new sources, this report shall be submitted to the Administrator no later than 150 days after startup or May 1, 1995, whichever is later. The statement shall include the information specified in paragraphs (e)(1) through (e)(4) of this section.

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<sup>1</sup> Included at the end of this Title V Operating Permit under Section IX. – Halogenated Solvent MACT Chart.

- (1) The name and address of the solvent cleaning machine owner or operator.
  - (2) The address of the solvent cleaning machine(s).
  - (3) The solvent/air interface area for each solvent cleaning machine or, for cleaning machines without a solvent/air interface, a description of the method used to determine the cleaning capacity and the results.
  - (4) The results of the first 3-month average emissions calculation.
- (g) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Sec. 63.464 shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs (g)(1) through (g)(4) of this section.
- (1) The size and type of each unit subject to this subpart (solvent/air interface area or cleaning capacity).
  - (2) The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.
  - (3) The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in Sec. 63.465(c).
  - (4) The reports required under paragraphs (f) and (g) of this section can be combined into a single report for each facility.
- (h) Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h) (1) through (3) of this section.
- (1) Information on the actions taken to comply with Sec. 63.463 (e) and (f).  
This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
  - (2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
  - (3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

Authority for Requirement: 40 CFR 63 Subpart T - Halogenated Solvent Cleaning  
567 IAC 23.1(4)"t"

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart A – General Provisions - 567 IAC 23.1(4). Excerpts are shown below.

*(Note: Citation numbering is consistent with 40 CFR Part 63.)*

#### **Sec. 63.4 Prohibited activities and circumvention.**

##### *(a) Prohibited activities.*

- (1) No owner or operator subject to the provisions of this part shall operate any affected source in violation of the requirements of this part except under—
  - (i) An extension of compliance granted by the Administrator under this part; or
  - (ii) An extension of compliance granted under this part by a State with an approved permit program; or
  - (iii) An exemption from compliance granted by the President under section 112(i)(4) of the Act.
- (2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

*(b) Circumvention.* No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to--

- (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;
- (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and
- (3) The fragmentation of an operation such that the operation avoids regulation by a relevant standard.

*(c) Severability.* Notwithstanding any requirement incorporated into a title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

#### **Sec. 63.6 Compliance with standards and maintenance requirements.**

##### *(e) Operation and maintenance requirements.*

- (1) (i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
- (2) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan

required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

Authority for Requirement: 40 CFR 63 Subpart A (General Provisions)  
567 IAC 23.1(4)

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-175**

### Associated Equipment

Associated Emission Unit ID Numbers: CTLL02

Emissions Control Equipment ID Number: CTLL0175

Emissions Control Equipment Description: Carbon Adsorber

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: CTLL02

Emission Unit Description: #1 & #2 – 84" Coil Finish Wash Line

Raw Material/Fuel: Perchloroethylene

Rated Capacity: 16.32 gallons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No emission limits at this time.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart T - National Emission Standards for Halogenated Solvent Cleaning - 567 IAC 23.1(4)"t". Excerpts are shown below:

*(Note: Citation numbering is consistent with 40 CFR Part 63.)*

#### **Sec. 63.464 Alternative standards.**

(d) As an alternative to meeting the requirements in Sec. 63.463, each owner or operator of a continuous web cleaning machine can demonstrate an overall cleaning system control efficiency of 70 percent or greater using the procedures in Sec. 63.465(g). This demonstration can be made for either a single cleaning machine or for a solvent cleaning system that contains one or more cleaning machines and ancillary equipment, such as storage tanks and distillation units. If the demonstration is made for a cleaning system, the facility must identify any modifications required to the procedures in Sec. 63.465(g) and they must be approved by the Administrator.

#### **Sec. 63.466 Monitoring procedures.**

(g) Each owner or operator using a control device listed in paragraphs (a) through (e) of this section can use alternative monitoring procedures approved by the Administrator.

#### Alternative Monitoring Method for the 84" Lines

The Alternative Monitoring Method for the 84" Lines listed below was approved by Donald C. Toensing, Chief, Air Permitting and Compliance Branch, Region 7 EPA, on January 5, 2000.

1. At the end of each month the carbon adsorption system will be regenerated since the carbon system can hold a large amount of solvent.
2. The amount of recycled solvent from the carbon adsorption system will be monitored with a totalizer flow meter. The amount of recycled solvent, R, will be equal to the flow meter reading minus the previous months ending flow meter reading converted to kilograms.
3. The kilograms of halogenated HAP liquid solvent added, Sa, will be equal to the amount of new halogenated HAP liquid solvent added to the 1-84 wash tank plus the amount of new halogenated HAP liquid solvent added to the 2-84 wash tank.
4. When possible, the wash tanks will be filled to the full line at the end of the month.
5. When possible, the holding tank will be kept empty.
6. The lines will be stopped to let the tank levels stabilize before dipping each tank to measure the amount of solvent in each tank. Each tank will be dipped on the first work day of each month and the amount of solvent in the tank calculated in kilograms.
7. Each still's boiling temperature will be measured on the first work day of each month. The amount of halogenated HAP solvent in the still will be calculated by using the boiling temperature of the material in the still and the chart of percent oil by volume versus boiling temperature<sup>1</sup> provided to EPA in Wayne Jochmann's (Alcoa) December 21, 1999 e-mail. The percent by volume of solvent will be calculated by subtracting the percent by volume of oil from 100. The amount of halogenated HAP liquid solvent in the still will be calculated by multiplying the volume percent by the volume of material in the still and dividing by 100. This volume will then be converted to kilograms by using a specific gravity of 1.615 kilograms per liter.
8. The amount of halogenated HAP liquid solvent removed from the cleaning system in solid waste, SSR, will be determined as specified in the rule.

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<sup>1</sup> Included at the end of this Title V Operating Permit under Section IX. – Halogenated Solvent MACT Chart.

Per 63.465(h)(1):

SSR = the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained either from tests conducted using EPA reference method 25d or by engineering calculations included in the compliance report.

9. The total halogenated HAP liquid solvent in the system, SIN, will be equal to the sum of the following in kilograms:
- The solvent in the 1-84 wash tank,
  - The solvent in the 2-84 wash tank,
  - The solvent in the holding tank,
  - The solvent in the 1-84 still, and
  - The solvent in the 2-84 still.

10. The overall cleaning system control efficiency ( $E_O$ ) will be determined as follows:

$$E_O = R_i / (R_i + Sa_i - SSR_i + SIN_{i-1} - SIN_i)$$

Where  $i$  is the most recent monthly reporting period and  $i-1$  is the previous monthly reporting period.

#### **Sec. 63.467 Recordkeeping requirements.**

(e) Each owner or operator of a continuous web cleaning machine complying with the provisions of Sec. 63.464(d) shall maintain the following records in either electronic or written form for a period of 5 years.

- (1) The dates and amounts of solvent that are added to the solvent cleaning machine.
- (2) The dates and amounts of solvent that are recovered from the desorption of the carbon adsorber system.
- (3) The solvent composition of wastes removed from each cleaning machine as determined using the procedures in Sec. 63.465(c)(2).
- (4) Calculation sheets showing the calculation and results of determining the overall cleaning system control efficiency, as required by Sec. 63.465.

#### **Sec. 63.468 Reporting requirements.**

(g) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of Sec. 63.464 shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs (g)(1) through (g)(4) of this section.

- (1) The size and type of each unit subject to this subpart (solvent/air interface area or cleaning capacity).
- (2) The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.
- (3) The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in Sec. 63.465(c).
- (4) The reports required under paragraphs (f) and (g) of this section can be combined into a single report for each facility.

(h) Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h) (1) through (3) of this section.

- (1) Information on the actions taken to comply with Sec. 63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
- (2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
- (3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

Authority for Requirement: 40 CFR 63 Subpart T - Halogenated Solvent Cleaning  
567 IAC 23.1(4)"t"

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart A – General Provisions - 567 IAC 23.1(4). Excerpts are shown below.

*(Note: Citation numbering is consistent with 40 CFR Part 63.)*

#### **Sec. 63.4 Prohibited activities and circumvention.**

##### *(a) Prohibited activities.*

- (1) No owner or operator subject to the provisions of this part shall operate any affected source in violation of the requirements of this part except under—
  - (i) An extension of compliance granted by the Administrator under this part; or
  - (ii) An extension of compliance granted under this part by a State with an approved permit program; or
  - (iii) An exemption from compliance granted by the President under section 112(i)(4) of the Act.
- (2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

*(b) Circumvention.* No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to--

- (1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;

- (2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and
- (3) The fragmentation of an operation such that the operation avoids regulation by a relevant standard.

(c) *Severability*. Notwithstanding any requirement incorporated into a title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

#### **Sec. 63.6 Compliance with standards and maintenance requirements.**

(e) Operation and maintenance requirements.

- (1) (i) At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
- (2) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

Authority for Requirement: 40 CFR 63 Subpart A (General Provisions)  
567 IAC 23.1(4)

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-336**

### Associated Equipment

Associated Emission Unit ID Numbers: DFRN01

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: DFRN01

Emission Unit Description: Pig Drying Furnace

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.012 MMcf/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 98-A-928  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 98-A-928  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### Process throughput:

- The fuel used by the aluminum pig dryer shall be limited to natural gas.
- Usage of natural gas fuel in this aluminum pig dryer shall not exceed 103 million cubic feet per year, which shall be determined on a 12-month-rolling monthly total.

**Reporting & Record keeping:**

The following records shall be maintained for five years and be available for inspections by representatives of DNR:

- Records shall be maintained which show the monthly total amount, measured in cubic feet of natural gas used in this oven.

Authority for Requirement: Iowa DNR Construction Permit 98-A-928

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 62

Stack Diameter (inches): 32

Stack Exhaust Flow Rate (acfm): 8,970

Stack Temperature (°F): 400

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-928

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Stack Testing:**

Pollutant – Opacity

1st Stack Test to be Completed by (date) – February 25, 2007

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – 567 IAC 22.108(3)"b"

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-273**

### Associated Equipment

Associated Emission Unit ID Numbers: FILT02

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: S-273

Emission Unit Description: #2 In-Line Fluxer Filter Box

Raw Material/Fuel: Metal

Rated Capacity: 34.85 tons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity standard is 40% during fluxing.

Authority for Requirement: Iowa DNR Construction Permit 85-A-067P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.4 lb./hr, 1.75 tons/year, 0.04 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 85-A-067P-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.4 lb./hr, 1.75 tons/year, 0.04 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 85-A-067P-S1

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #2 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #2

Authority for Requirement: Iowa DNR Construction Permit 85-A-067P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- The amount of chlorine used in this flux box shall not exceed 0.04 lb./ton aluminum.
- This in-line fluxer filter box shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- Record the amount of chlorine used in this in-line flux box.
- Record the amount of aluminum processed in this in-line fluxer filter box, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 85-A-067P-S1

#### **NESHAP:**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing In-Line Fluxer. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 74.6

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (acfm): 5,000

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 85-A-067P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation when fluxing is not occurring and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-285**

### Associated Equipment

Associated Emission Unit ID Numbers: FILT03

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: FILT03

Emission Unit Description: #3 In-Line Fluxer Filter Box

Raw Material/Fuel: Metal

Rated Capacity: 34.85 tons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity is 40% during fluxing.

Authority for Requirement: Iowa DNR Construction Permit 87-A-045P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.4 lb./hr, 1.75 tons/year, 0.04 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 87-A-045P-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.4 lb./hr, 1.75 tons/year, 0.04 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 87-A-045P-S1

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #3 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #3.

Authority for Requirement: Iowa DNR Construction Permit 87-A-045P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- The amount of chlorine used in this flux box shall not exceed 0.04 lb./ton aluminum.
- This in-line fluxer filter box shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- Record the amount of chlorine used in this in-line flux box.
- Record the amount of aluminum processed in this in-line fluxer filter box, in tons. Calculate and record monthly and 12-monthly rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 87-A-045P-S1

#### **NESHAP:**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing In-Line Fluxer. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 74.6

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (acfm): 5,000

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 87-A-045P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation when fluxing is not occurring and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-292**

### Associated Equipment

Associated Emission Unit ID Numbers: FILT04

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: FILT04

Emission Unit Description: #4 In-Line Fluxer Filter Box

Raw Material/Fuel: Metal

Rated Capacity: 34.85 tons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity standard is 40% during fluxing.

Authority for Requirement: Iowa DNR Construction Permit 89-A-177P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.4 lb./hr, 1.75 tons/year, 0.04 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 89-A-177P-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.4 lb./hr, 1.75 tons/year, 0.04 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 89-A-177P-S1

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #4 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #4.

Authority for Requirement: Iowa DNR Construction Permit 89-A-177P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- The amount of chlorine gas used in this flux box shall not exceed 0.04 lb./ton aluminum.
- This in-line fluxer filter box shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- Record the amount of chlorine used in this in-line flux box.
- Record the amount of aluminum processed in this in-line fluxer filter box, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 89-A-177P-S1

#### **NESHAP:**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing In-Line Fluxer. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 74.6

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (acfm): 5,000

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 89-A-177P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation when fluxing is not occurring and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-044**

### Associated Equipment

Associated Emission Unit ID Numbers: FILT14

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: FILT14

Emission Unit Description: #14 R-622 Filter Box (metal)

Raw Material/Fuel: Metal

Rated Capacity: 34.85 tons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(3)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 94-A-612-S1

Pollutant: PM<sub>10</sub>

Emission Limit(s): 1.5 lbs./hr, 6.57 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 94-A-612-S1

Pollutant: PM

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing In-Line Fluxer. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office

at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 75

Stack Diameter (feet): 3.5

Stack Exhaust Flow Rate (scfm): 5,200 scfm for this source only. The fan must be rated at 13,700 scfm and must be connected to two other sources (fugitive hoods), in addition to this source.

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Location: Stack is located near the southeast portion of the plant (the older portion).

Authority for Requirement: Iowa DNR Construction Permit 94-A-612-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-341**

### Associated Equipment

Associated Emission Unit ID Numbers: FILT17

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: FILT17

Emission Unit Description: #17 In-Line Fluxer Filter Box

Raw Material/Fuel: Metal

Rated Capacity: 16.00 tons/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 02-A-233  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.55 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-233

Pollutant: Particulate Matter

Emission Limit(s): 0.55 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-233

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-233  
567 IAC 23.3(2)"a"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process Throughput:**

- A. The amount of chlorine gas used in any batch shall not exceed 150 standard cubic feet.
- B. This flux box shall be fired by natural gas only.

#### **Reporting & Record keeping:**

All records required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of any fluxing gas used in this flux box.

Authority for Requirement: Iowa DNR Construction Permit 02-A-233

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing In-Line Fluxer. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 74.6

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (acfm): 5,000

Stack Temperature (°F): 125

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 02-A-233

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-342**

### Associated Equipment

Associated Emission Unit ID Numbers: FILT18

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: FILT18

Emission Unit Description: #18 In-Line Fluxer Filter Box

Raw Material/Fuel: Metal

Rated Capacity: 16.00 tons/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 02-A-234  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.55 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-234

Pollutant: Particulate Matter

Emission Limit(s): 0.55 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-234

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-234  
567 IAC 23.3(2)"a"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process Throughput:**

- A. The amount of chlorine gas used in any batch shall not exceed 150 standard cubic feet.
- B. This flux box shall be fired by natural gas only.

#### **Reporting & Record keeping:**

All records required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of any fluxing gas used in this flux box.

Authority for Requirement: Iowa DNR Construction Permit 02-A-234

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing In-Line Fluxer. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 74.6

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (acfm): 5,000

Stack Temperature (°F): 125

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 02-A-234

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Number: Aging

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### Applicable Requirements

EP = Emission Point

EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
S-147	GFRN13	#13 Aging Furnace	Natural Gas	0.006 MMcf/hr
S-146	GFRN14	#14 Aging Furnace	Natural Gas	0.006 MMcf/hr
S-145	GFRN15	#15 Aging Furnace	Natural Gas	0.006 MMcf/hr
S-144	GFRN16	#16 Aging Furnace	Natural Gas	0.006 MMcf/hr
S-143	GFRN17	#17 Aging Furnace	Natural Gas	0.006 MMcf/hr
S-125	GFRN31	60" Ager #31	Natural Gas	0.009 MMcf/hr
S-126	GFRN32	210" Ager #32	Natural Gas	0.020 MMcf/hr

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### Periodic Monitoring Requirements

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-272**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN02

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN02

Emission Unit Description: #2 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.016 MMcf/hr Natural Gas and 34.85 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity standard is 40% during fluxing.

Authority for Requirement: Iowa DNR Construction Permit 92-A-619P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 92-A-619P-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 92-A-619P-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #2 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #2.

Authority for Requirement: DRAFT Iowa DNR Construction Permit 92-A-619P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- A. The amount of chlorine used in this holder shall not exceed 1.24 lb./ton aluminum.
- B. This holder may be fluxed with chlorine gas and/or chloride salts.
- C. This holder shall use the SNORT system whenever fluxing with chlorine gas.
- D. This holder shall be fired by natural gas only.
- E. The amount of natural gas fired in all of casting complex #2 (melter, holder and fluxer) shall not exceed  $542 \times 10^6$  cubic feet per 12-month rolling period.
- F. This holder shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 92-A-619P-S1

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of any chlorine used in this holder.
- B. Record the amount of natural gas used in casting complex #2, in cubic feet. Calculate and record monthly and 12-month totals.
- C. Record the amount of aluminum processed in this holder, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 92-A-619P-S1

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 99.6

Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 16,565

Stack Temperature (°F): 831

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-619P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation when fluxing is not occurring and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5% this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-284**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN03

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN03

Emission Unit Description: #3 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.016 MMcf/hr Natural Gas and 34.85 tons/hr Aluminum

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity standard is 40% during fluxing.

Authority for Requirement: Iowa DNR Construction Permit 92-A-620P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 92-A-620P-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 92-A-620P-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #3 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #3.

Authority for Requirement: Iowa DNR Construction Permit 92-A-620P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### Process throughput:

- A. The amount of chlorine gas used in this holder in either gaseous or salt form shall not exceed 1.24 lb./ton aluminum.
- B. This holder may be fluxed with chlorine gas and/or chloride salts.
- C. This holder shall use the SNORT system whenever fluxing with chlorine gas.
- D. This holder shall be fired by natural gas only.
- E. The amount of natural gas fired in all of casting complex #3 (melter, holder, and fluxer) shall not exceed  $542 \times 10^6$  cubic feet per 12-month rolling period.
- F. This holder shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 92-A-620P-S1

#### Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of any chlorine used in this holder.
- B. Record the amount of natural gas used in casting complex #3, in cubic feet. Calculate and record monthly and 12-month rolling totals.
- C. Record the amount of aluminum processed in this holder, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 92-A-620P-S1

#### NESHAP

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 99.6

Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 17,640

Stack Temperature (°F): 802

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-620P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation when fluxing is not occurring and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5% this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-291**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN04

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN04

Emission Unit Description: #4 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.016 MMcf/hr Natural Gas and 34.85 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity standard is 40% during fluxing.

Authority for Requirement: Iowa DNR Construction Permit 92-A-621P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 92-A-621P-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 92-A-621P-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #4 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #4.

Authority for Requirement: Iowa DNR Construction Permit 92-A-621P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- A. The amount of chlorine used in this holder shall not exceed 1.24 lb/ton aluminum.
- B. This holder may be fluxed with chlorine gas and/or chloride salts.
- C. This holder shall use the SNORT system whenever fluxing with chlorine gas.
- D. This holder shall be fired by natural gas only.
- E. The amount of natural gas fired in all of casting complex #4 (melter, holder, and fluxer) shall not exceed  $543 \times 10^6$  cubic feet per 12-month rolling period.
- F. This holder shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 92-A-621P-S1

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of any chlorine used in this holder.
- B. Record the amount of natural gas used in casting complex #4, in cubic feet. Calculate and record monthly and 12-month rolling totals.
- C. Record the amount of aluminum processed in this holder, in tons. Calculate and record monthly and 12-monthly rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 92-A-621P-S1

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 99.6

Stack Diameter (feet): 36

Stack Exhaust Flow Rate (acfm): 18,575

Stack Temperature (°F): 773

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-621P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation when fluxing is not occurring and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5% this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-043**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN14

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN14

Emission Unit Description: #14 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.010 MMcf/hr Natural Gas and 16 tons/hr Aluminum

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 6.0 lbs./hr, 7.5 tons/year

Authority for Requirement: Iowa DNR Construction Permit 92-A-623

Pollutant: Particulate Matter

Emission Limit(s): 26.28 lbs./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 16 tons

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

1. Fluxing hours shall not exceed 2,464 hours for any twelve-(12) month rolling average.
2. Fluxing gas shall be a mixture of ninety-seven percent (97%) Argon and three percent (3%) Chlorine.
3. This source shall be identified by permanent labels both in the plant and at the emission point on the roof.

Reporting & Record keeping:

1. A log of equipment usage shall be maintained on site which shall record the number of minutes of fluxing per month and for the previous twelve (12) months as well as any modification of the fluxing ratio. These shall be collected by means of a standard documented manual and/or mechanical procedure. The procedural documents (as well as any changes) together with the monthly records shall be maintained on site for at least five (5) years.
2. The owner/operator shall furnish the DNR written notification as follows:
  - a. Notification of usage of this source contrary to the operational limits and requirements listed above.
  - b. The owner/operator shall submit an Annual Report to the Department postmarked no later than thirty (30) days after the end of each calendar year including:
    - The calendar dates covered by the report.
    - Photocopies of the records for the calendar year maintained as described above.
    - Certification by the owner/operator that the report is complete and accurate.

Authority for Requirement: Iowa DNR Construction Permit 92-A-623

NESHAP

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. This unit is regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 74.1

Stack Diameter (feet): 3.56

Stack Exhaust Flow Rate (scfm): 1,500

Stack Temperature (°F): 655

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Location: Building #810, Grid Location B200.5, 4400 feet east and 1500 feet south of Alcoa's atmospheric emission grid origin.

Authority for Requirement: Iowa DNR Construction Permit 92-A-623

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-047**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN15 and FILT15

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN15

Emission Unit Description: #15 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.010 MMcf/hr Natural Gas and 16 tons/hr Aluminum

Emission Unit vented through this Emission Point: FILT15

Emission Unit Description: #15 In-Line Fluxer Filter Box

Raw Material/Fuel: Metal

Rated Capacity: 16 tons/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 6.0 lbs./hr, 7.5 tons/year

Authority for Requirement: Iowa DNR Construction Permit 92-A-624

Pollutant: Particulate Matter

Emission Limit(s): 26.28 lbs./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 16 tons

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

1. Fluxing hours shall not exceed 2,464 hours for any twelve-(12) month rolling average.
2. Fluxing gas shall be a mixture of ninety-seven percent (97%) Argon and three percent (3%) Chlorine.
3. This source shall be identified by permanent labels both in the plant and at the emission point on the roof.

### **Reporting & Record keeping:**

1. A log of equipment usage shall be maintained on site which shall record the number of minutes of fluxing per month and for the previous twelve (12) months as well as any modification of the fluxing ratio. These shall be collected by means of a standard documented manual and/or mechanical procedure. The procedural documents (as well as any changes) together with the monthly records shall be maintained on site for at least five (5) years.
2. The owner/operator shall furnish the DNR written notification as follows:
  - a. Notification of usage of this source contrary to the operational limits and requirements listed above.
  - b. The owner/operator shall submit an Annual Report to the Department postmarked no later than thirty (30) days after the end of each calendar year including:
    - The calendar dates covered by the report.
    - Photocopies of the records for the calendar year maintained as described above.
    - Certification by the owner/operator that the report is complete and accurate.

Authority for Requirement: Iowa DNR Construction Permit 92-A-624

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace (EU HFRN15) and an existing In-Line Fluxer (EU FILT15). Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 100.0

Stack Diameter (feet): 4.3

Stack Exhaust Flow Rate (scfm): 1,600

Stack Temperature (°F): 655

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Location: Building #810, Grid Location B204.5, 4440 feet east and 1500 feet south of Alcoa's atmospheric emission grid origin.

Authority for Requirement: Iowa DNR Construction Permit 92-A-624

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-050**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN16 and FILT16

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN16

Emission Unit Description: #16 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.010 MMcf/hr Natural Gas and 16 tons/hr Aluminum

Emission Unit vented through this Emission Point: FILT16

Emission Unit Description: #16 In-Line Fluxer Filter Box

Raw Material/Fuel: Metal

Rated Capacity: 16 tons/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 92-A-625S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.10 gr/dscf, 6.0 lbs./hr, 7.5 tons/year

Authority for Requirement: Iowa DNR Construction Permit 92-A-625S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Hours of operation:**

- Fluxing in the holding furnace shall not exceed 2,464 hours for any consecutive (12) month period.

#### **Process throughput:**

- Fluxing gas used in the holding furnace shall be a mixture of ninety-seven percent (97%) Argon and three percent (3%) Chlorine.

#### **Reporting & Record keeping:**

The owner or operator of the source shall keep records to verify that the operational limits and requirements are met. These records shall contain the number of hours in which fluxing occurred in the #16 Holding Furnace for each consecutive 12-month period. The mix of Argon and Chlorine used shall also be recorded for each consecutive 12-month period. These records shall be maintained on site for five (5) years and made available to Department personnel on request.

Authority for Requirement: Iowa DNR Construction Permit 92-A-625S1

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace (EU HFRN16) and an existing In-Line Fluxer (EU FILT16). Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 100

Stack Diameter (feet): 4.25

Stack Exhaust Flow Rate (scfm): 19,200

Stack Temperature (°F): 365

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 92-A-625S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 20%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-052**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN17

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN17

Emission Unit Description: #17 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.025 MMcf/hr Natural Gas and 16 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 92-A-626-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 92-A-626-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 92-A-626-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 92-A-626-S1  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

- A. The amount of chlorine gas used in any batch shall not exceed 150 standard cubic feet.
- B. This holder may be fluxed with magnesium and/or sodium salts not exceeding 150 pounds per batch.
- C. The fluxing hours for this holder shall not exceed 2,464 hours per 12-month rolling period.<sup>(1)</sup>
- D. This holder shall be fired by natural gas only.

<sup>(1)</sup> Per the May 30, 2002 clarification letter from Gary Smith of IDNR to Wayne Jochmann of Alcoa, this limit applies only to the gas fluxing and not to the salt fluxing.

### **Reporting & Record keeping:**

All records required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of any fluxing gas used in this holder.
- B. Record the amount of any fluxing salt used in this holder
- C. Record the number of hours fluxing is done in this holder. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 92-A-626-S1

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 77.6

Stack Diameter (inches): 43

Stack Exhaust Flow Rate (acfm): 27,000

Stack Temperature (°F): 505

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-626-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-057**

### Associated Equipment

Associated Emission Unit ID Numbers: HFRN18

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HFRN18

Emission Unit Description: #18 Holding Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.025 MMcf/hr Natural Gas and 16 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 92-A-627-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 92-A-627-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 92-A-627-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 92-A-627-S1  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

- A. The amount of chlorine gas used in any batch shall not exceed 150 standard cubic feet.
- B. This holder may be fluxed with magnesium and/or sodium salts not exceeding 150 pounds per batch.
- C. The fluxing hours for this holder shall not exceed 2,464 hours per 12-month rolling period.<sup>(1)</sup>
- D. This holder shall be fired by natural gas only.

<sup>(1)</sup> Per the May 30, 2002 clarification letter from Gary Smith of IDNR to Wayne Jochmann of Alcoa, this limit applies only to the gas fluxing and not to the salt fluxing.

### **Reporting & Record keeping:**

All records required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the amount of any fluxing gas used in this holder.
- B. Record the amount of any fluxing salt used in this holder
- C. Record the number of hours fluxing is done in this holder. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 92-A-627-S1

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 77.6

Stack Diameter (inches): 43

Stack Exhaust Flow Rate (acfm): 27,000

Stack Temperature (°F): 505

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 92-A-627-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-288**

### Associated Equipment

Associated Emission Unit ID Numbers: HMIL10

Emissions Control Equipment ID Number: HMIL0288

Emissions Control Equipment Description: Centrifugal Mist Eliminator

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HMIL10

Emission Unit Description: 100" 5 Stand Hot Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 41.3 lb./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 35 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 88-A-158 and 88-A-159  
567 IAC 23.3(2)"a"

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-289**

### Associated Equipment

Associated Emission Unit ID Numbers: HMIL10

Emissions Control Equipment ID Number: HMIL0289

Emissions Control Equipment Description: Centrifugal Mist Eliminator

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HMIL10

Emission Unit Description: 100" 5 Stand Hot Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 41.3 lb./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 35 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 88-A-158 and 88-A-159  
567 IAC 23.3(2)"a"

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-119**

### Associated Equipment

Associated Emission Unit ID Numbers: HMIL22

Emissions Control Equipment ID Number: HMIL0119

Emissions Control Equipment Description: Chevron Screen (Mist Eliminator)

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HMIL22

Emission Unit Description: 220" Hot Mill Line

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-120**

### Associated Equipment

Associated Emission Unit ID Numbers: HMIL22

Emissions Control Equipment ID Number: HMIL0120

Emissions Control Equipment Description: Chevron Screen (Mist Eliminator)

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HMIL22

Emission Unit Description: 220" Hot Mill Line

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-071**

### Associated Equipment

Associated Emission Unit ID Numbers: HMILPH

Emissions Control Equipment ID Number: HMIL0071

Emissions Control Equipment Description: Demister

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: HMILPH

Emission Unit Description: PAHTS 144" Taper Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-307**

### Associated Equipment

Associated Emission Unit ID Numbers: LDRY01

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: LDRY01

Emission Unit Description: Litho Line Dryer

Raw Material/Fuel: Surfactant

Rated Capacity: 1.00 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.05 lbs./hr, 0.15 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 93-A-119

Pollutant: Particulate Matter

Emission Limit(s): 4.10 lbs./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 1.00 ton/hr

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-314**

### Associated Equipment

Associated Emission Unit ID Numbers: LHLT05  
Emissions Control Equipment ID Number: LHLT0314  
Emissions Control Equipment Description: Bag Filter

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: LHLT05  
Emission Unit Description: Lime Storage for Blowdown Treatment  
Raw Material/Fuel: Lime  
Rated Capacity: 0.36 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 40%  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>  
Emission Limit(s): 0.40 lb./hr, 0.03 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 94-A-546

Pollutant: Particulate Matter  
Emission Limit(s): 0.40 lb./hr, 0.03 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 94-A-546

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Hours of operation:  
Hours of operation are limited to 156 hours per year.

Process throughput:  
1. Storage capacity of silo is 2,000 cubic feet of lime.  
2. Throughput is limited to 3,120 tons of lime per year.

Control equipment parameters:

Maintain baghouse according to manufacturer's specifications and recommendations to achieve at least 99% control efficiency.

Reporting & Record keeping:

The following records must be maintained onsite for at least five (5) years to indicate the following:

1. Monthly hours of operation (loading silo).
2. Quantity of lime loaded to silo each month of operation in tons/month.
3. During first 12-months of operation of this permitted source, record cumulative hours of operation and quantity of lime loaded each month of operation.
4. After first 12-months of operation of this permitted source, record annual hours of operation and quantity of lime loaded on a rolling-month basis every month of operation.
5. Maintenance and/or replacement of the filters.

Authority for Requirement: Iowa DNR Construction Permit 94-A-546

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 39

Stack Diameter (inches): 15 x 9.25

Stack Exhaust Flow Rate (cfm): 1,200

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 94-A-546

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-201**

### Associated Equipment

Associated Emission Unit ID Numbers: LMIL01

Emissions Control Equipment ID Number: LMIL0201

Emissions Control Equipment Description: Demister

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: LMIL01

Emission Unit Description: #1 Light Rolling Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-203**

### Associated Equipment

Associated Emission Unit ID Numbers: LMIL02

Emissions Control Equipment ID Number: LIM0203

Emissions Control Equipment Description: Demister

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: LMIL02

Emission Unit Description: #2 Light Rolling Mill

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-306**

### Associated Equipment

Associated Emission Unit ID Numbers: LWSH01  
Emissions Control Equipment ID Number: LWSH0306  
Emissions Control Equipment Description: Wet Scrubber

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: LWSH01  
Emission Unit Description: Litho Line Wash Unit  
Raw Material/Fuel: Surfactant  
Rated Capacity: 2.75 tons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 40%  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>  
Emission Limit(s): 1.00 lbs./hr, 4.38 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 93-A-118

Pollutant: Particulate Matter  
Emission Limit(s): 8.07 lbs./hr<sup>(1)</sup>  
<sup>(1)</sup> based on a process weight rate of 2.75 tons/hr  
Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet above ground): 75  
Vertical, Unobstructed Discharge Required: Yes ☐ No ☒  
Authority for Requirement: Iowa DNR Construction Permit 93-A-118

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment: Particulate Matter

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-271**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN02

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN02

Emission Unit Description: #2 Melting Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.070 MMcf/hr Natural Gas and 34.85 tons/hr Aluminum

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity standard is 40% during startup. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less.

Authority for Requirement: Iowa DNR Construction Permit 85-A-065P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 85-A-065P-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 85-A-065P-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #2 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #2.

Authority for Requirement: DRAFT Iowa DNR Construction Permit 85-A-065P-S1

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Process throughput:**

- This melter shall be charged with aluminum ingots and other aluminum complying with NESHAP subpart RRR.
- This melter shall be fired by natural gas only.
- This melter shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.
- The amount of natural gas fired in all of casting complex #2 (melter, holder, and fluxer) shall not exceed  $542 \times 10^6$  cubic feet per 12-month rolling period.

Authority for Requirement: DRAFT Iowa DNR Construction Permit 85-A-065P-S1

### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- Record the amount of natural gas used in casting complex #2, in cubic feet. Calculate and record monthly and 12-month rolling totals.
- Record the amount of aluminum processed in this melter, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 85-A-065P-S1

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 103.6

Stack Diameter (inches): 85

Stack Exhaust Flow Rate (acfm): 68,700

Stack Temperature (°F): 566

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 85-A-065P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation except during startup and record the reading. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-283**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN03

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN03

Emission Unit Description: #3 Melting Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.070 MMcf/hr Natural Gas and 34.85 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity is 40% during startup. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less.

Authority for Requirement: Iowa DNR Construction Permit 87-A-043P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 87-A-043P-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: Iowa DNR Construction Permit 87-A-043P-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./mmcf<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #2 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #3.

Authority for Requirement: Iowa DNR Construction Permit 85-A-065P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- This melter shall be charged with aluminum ingots and other aluminum complying with NESHAP subpart RRR.
- This melter shall be fired by natural gas only.
- This melter shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.
- The amount of natural gas fired in all of casting complex #3 (melter, holder, and fluxer) shall not exceed  $542 \times 10^6$  cubic feet per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 87-A-043P-S1

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- Record the amount of natural gas used in casting complex #3, in cubic feet. Calculate and record monthly and 12-month rolling totals.
- Record the amount of aluminum processed in this melter, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 87-A-043P-S1

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 103.6

Stack Diameter (inches): 85

Stack Exhaust Flow Rate (acfm): 71,145

Stack Temperature (°F): 385

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 87-A-043P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation except during startup and record the reading. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-290**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN04

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN04

Emission Unit Description: #4 Melting Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.070 MMcf/hr Natural Gas and 34.85 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 5%<sup>(1)</sup>

<sup>(1)</sup> Opacity standard is 40% during startup. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less.

Authority for Requirement: DRAFT Iowa DNR Construction Permit 89-A-175P-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: DRAFT Iowa DNR Construction Permit 89-A-175P-S1

Pollutant: Particulate Matter

Emission Limit(s): 4.0 lb./hr, 17.5 tons/year, 0.4 lb./ton Aluminum

Authority for Requirement: DRAFT Iowa DNR Construction Permit 89-A-175P-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 38 tons/year<sup>(2)</sup>, 140 lb./MMBtu<sup>(3)</sup>

<sup>(2)</sup> Total NO<sub>x</sub> emissions for all of #2 casting complex.

<sup>(3)</sup> Limit is the average across casting complex #4.

Authority for Requirement: Iowa DNR Construction Permit 89-A-175P-S1

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- This melter shall be charged with aluminum ingots and other aluminum complying with NESHAP subpart RRR.
- This melter shall be fired by natural gas only.
- This melter shall process a maximum of 197,000 tons of aluminum per 12-month rolling period.
- The amount of natural gas fired in all of casting complex #4 (melter, holder, and fluxer) shall not exceed  $542 \times 10^6$  cubic feet per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction 89-A-175P-S1

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- Record the amount of natural gas used in casting complex #4, in cubic feet. Calculate and record monthly and 12-month rolling totals.
- Record the amount of aluminum processed in this melter, in tons. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 89-A-175P-S1

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 103.6

Stack Diameter (inches): 85

Stack Exhaust Flow Rate (acfm): 56,213

Stack Temperature (°F): 792

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 89-A-175P-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation except during startup and record the reading. Startup is defined as the time the charge is initiated until the charge has been melted and the bath is flat, or two hours from the time the charge is initiated, whichever is less. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 5%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-040**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN13

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN13

Emission Unit Description: #13 Melting Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.035 MMcf/hr Natural Gas and 16 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 15%

Authority for Requirement: Iowa DNR Construction Permit 97-A-252  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 3.58 lbs./hr, 13.1 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 97-A-252

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 97-A-252  
567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Reporting & Record keeping:**

The following records shall be maintained on-site for five (5) years and be made available for inspection:

The permittee shall record:

- a. Aluminum (Al) throughput rate monthly;
- b. Operation hours monthly; and
- c. Calculate and record averaged PM emissions monthly use the following formula:

$$\text{PM emission lbs./hr} = ((\text{Al ton/month}) \times (\text{PM E.F.})) / (\text{operation hour/month})$$

$$\text{PM emission TPY} = ((\text{PM E.F.}) \times (\text{Al tons/year})) / (2,000 \text{ lbs./ton})$$

Where: PM E.F. should be 0.26 lb./ton of aluminum or test data from this furnace, whichever is larger.

Authority for Requirement: Iowa DNR Construction Permit 97-A-252

#### NESHAP

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

#### Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 71

Stack Diameter (inches): 65

Stack Exhaust Flow Rate (acfm): 59,500

Stack Temperature (°F): 605

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 97-A-252

#### Periodic Monitoring Requirements

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.

3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 15%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-045**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN14

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN14

Emission Unit Description: #14 Melting Furnace

Raw Material/Fuel: Natural Gas, Waste Oil, and Aluminum

Rated Capacity: 0.035 MMcf/hr Natural Gas, 250 gallons/hr Waste Oil, and  
16 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 15%

Authority for Requirement: Iowa DNR Construction Permit 97-A-253  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 3.58 lbs./hr, 13.1 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 97-A-253

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv (Natural Gas)

Authority for Requirement: Iowa DNR Construction Permit 97-A-253  
567 IAC 23.3(3)"e"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu (Waste Oil)

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Reporting & Record keeping:**

The following records shall be maintained on-site for five (5) years and be made available for inspection:

The permittee shall record:

- a. Aluminum (Al) throughput rate monthly;
- b. Operation hours monthly; and
- c. Calculate and record averaged PM emissions monthly use the following formula:

$$\text{PM emission lbs./hr} = ((\text{Al ton/month}) \times (\text{PM E.F.})) / (\text{operation hour/month})$$
$$\text{PM emission TPY} = ((\text{PM E.F.}) \times (\text{Al tons/year})) / (2,000 \text{ lbs./ton})$$

Where: PM E.F. should be 0.26 lb./ton of aluminum or test data from this furnace, whichever is larger.

Authority for Requirement: Iowa DNR Construction Permit 97-A-253

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

#### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 71

Stack Diameter (inches): 65

Stack Exhaust Flow Rate (acfm): 59,500

Stack Temperature (°F): 605

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 97-A-253

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point during normal operation and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Alcoa shall use the following procedure to monitor opacity:

1. Check the opacity to ensure no visible emissions.
2. If visible emissions are observed, implement corrective action within eight hours from the observation of visible emissions.
3. Conduct a Method 9 observation if the initial corrective action does not return the observation to no visible emissions.
4. If the Method 9 observation is greater than 15%, this would be a violation. Implement additional corrective action within eight hours from the Method 9 observation and then take another Method 9 observation.
5. If weather conditions prevent a Method 9 observation, note on the data observation sheet and attempt at approximately 2-hour intervals throughout the day.
6. If weather conditions prevent a Method 9 observation for a week, complete the observation the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-048**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN15

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN15

Emission Unit Description: #15 Melting Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.035 MMcf/hr and 16 tons/hr Aluminum

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 26.28 lbs./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 16 tons

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office

at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-049**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN16

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN16

Emission Unit Description: #16 Melting Furnace

Raw Material/Fuel: Natural Gas, Waste Oil, and Aluminum

Rated Capacity: 0.035 MMcf/hr Natural Gas, 250 gallons Waste Oil, and  
16 tons/hr Aluminum

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 26.28 lbs./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 16 tons

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv (Natural Gas)

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu (Waste Oil)

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-053**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN17

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN17

Emission Unit Description: #17 Melting Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.035 MMcf/hr Natural Gas and 16 tons/year Aluminum

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 26.28 lbs./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 16 tons

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv (Natural Gas)

Authority for Requirement: 567 IAC 23.3(3)"e"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office

at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-056**

### Associated Equipment

Associated Emission Unit ID Numbers: MFRN18

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MFRN18

Emission Unit Description: #18 Melting Furnace

Raw Material/Fuel: Natural Gas and Aluminum

Rated Capacity: 0.035 MMcf/hr Natural Gas and 16 tons/year Aluminum

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 26.28 lbs./hr<sup>(1)</sup>

<sup>(1)</sup> based on a process weight rate of 16 tons

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv (Natural Gas)

Authority for Requirement: 567 IAC 23.3(3)"e"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **NESHAP**

- The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production - 567 IAC 23.1(4)"br" by March 24, 2003. These units are regulated under Subpart RRR as an existing Group 1 Furnace. Excerpts of the Subpart RRR requirements are included in Section V of this permit.
- The facility's approved Operation, Maintenance, and Monitoring Plan required by Subpart RRR is available for public inspection Monday-Friday, 8: a.m. - 4:30 p.m. at the IDNR office

at 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. It is also on file at the IDNR office at 1004 W. Madison, Washington, Iowa 52353.

Authority for Requirement: 40 CFR 63 Subpart RRR - Secondary Aluminum Production  
567 IAC 23.1(4)"br"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: S-097**

Associated Equipment

Associated Emission Unit ID Numbers: MMCH03

Emissions Control Equipment ID Number: none

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**Applicable Requirements**

Emission Unit vented through this Emission Point: MMCH03

Emission Unit Description: #3 Mill Machine

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-098**

### Associated Equipment

Associated Emission Unit ID Numbers: MMCH03

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: MMCH03

Emission Unit Description: #3 Mill Machine

Raw Material/Fuel: Metal

Rated Capacity: Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

<sup>(1)</sup> If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate matter standard.

Authority for Requirement: Iowa DNR Construction Permit 79-A-008S1  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 3.8 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 79-A-008S1

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 8.0 lbs./hr, 35 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 79-A-008S1

#### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 58.81

Stack Diameter (inches): 18 x 144

Stack Exhaust Flow Rate (scfm): 10,500

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 79-A-008S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-300**

### Associated Equipment

Associated Emission Unit ID Numbers: OCOM01

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: OCOM01

Emission Unit Description: Ingot Plant Standby Diesel Generator

Raw Material/Fuel: Diesel

Rated Capacity: 390 Hp

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: Iowa DNR Construction Permit 90-A-392

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

#### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Exhaust Flow Rate (cfm): 2,540

Stack Temperature (°F): 900

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 90-A-392

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-315**

### Associated Equipment

Associated Emission Unit ID Numbers: OCOM02

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: OCOM02

Emission Unit Description: MIS Standby Diesel Engine/Generator

Raw Material/Fuel: Diesel

Rated Capacity: 1,332 hp-hr/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 97-A-144  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.46 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 97-A-144

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 97-A-144  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 97-A-144

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Hours of operation:**

The hours of operation of the diesel engine administered under DNR permit 97-A-144 shall not exceed 2,400 hours per twelve-month total, rolled monthly, period.

#### **Reporting & Record keeping:**

The permit holder shall maintain records on the premises to show the twelve-month total, rolled monthly, hours of operation of the equipment administered under DNR permit 97-A-144. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 97-A-144

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 12

Stack Diameter (inches): 10

Stack Exhaust Flow Rate (scfm): 8,092

Stack Temperature (°F): 1,027

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 97-A-144

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-319**

### Associated Equipment

Associated Emission Unit ID Numbers: OCOM06

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: OCOM06

Emission Unit Description: High Pressure Water System Pump Engine

Raw Material/Fuel: Diesel

Rated Capacity: 420 hp-hr/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 97-A-141  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 1.85 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 97-A-141

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 97-A-141  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 97-A-141

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Hours of operation:**

The hours of operation of the diesel engine administered under DNR permit 97-A-141 shall not exceed 2,350 hours per twelve-month total, rolled monthly, period.

**Reporting & Record keeping:**

The permit holder shall maintain records on the premises to show the twelve-month total, rolled monthly, hours of operation of the equipment administered under DNR permit 97-A-141. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 97-A-141

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 36.6

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (scfm): 3,351

Stack Temperature (°F): 956

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 97-A-141

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-320**

### Associated Equipment

Associated Emission Unit ID Numbers: OCOM07

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: OCOM07

Emission Unit Description: High Pressure Water System Pump Engine

Raw Material/Fuel: Diesel

Rated Capacity: 420 hp-hr/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 97-A-142  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 1.85 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 97-A-142

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 97-A-142  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 97-A-142

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Hours of operation:**

The hours of operation of the diesel engine administered under DNR permit 97-A-142 shall not exceed 2,350 hours per twelve-month total, rolled monthly, period.

#### **Reporting & Record keeping:**

The permit holder shall maintain records on the premises to show the twelve-month total, rolled monthly, hours of operation of the equipment administered under DNR permit 97-A-142. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 97-A-142

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 36.6

Stack Diameter (inches): 8

Stack Exhaust Flow Rate (scfm): 3,351

Stack Temperature (°F): 956

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 97-A-142

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-321**

### Associated Equipment

Associated Emission Unit ID Numbers: OCOM08

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: OCOM08

Emission Unit Description: Low Pressure Water System Pump

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.037 MMcf/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-335**

### Associated Equipment

Associated Emission Unit ID Numbers: OCOM10

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: OCOM10

Emission Unit Description: High Pressure Water System Backup Generator

Raw Material/Fuel: Diesel

Rated Capacity: 749 hp-hr/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 98-A-1009  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 98-A-1009  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 1.18 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-1009

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 98-A-1009

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Hours of operation:**

The twelve-month total, rolled monthly, hours of operation of the diesel-fired generator administered under DNR Permit 98-A-1009 shall not exceed 2,500.

#### **Reporting & Record keeping:**

The permit holder shall maintain records on the premises to show the twelve-month total, rolled monthly, hours of operation of the diesel-fired generator administered under DNR Permit 98-A-1009. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 98-A-1009

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 15.0

Stack Diameter (inches): 8.0

Stack Exhaust Flow Rate (scfm): 1,358

Stack Temperature (°F): 1,187

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 98-A-1009

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: Preheat Furnaces (Indirect-Fired)

### Applicable Requirements

*EP = Emission Point*

*EU = Emission Unit*

EP	EU	EU Description	Raw Material	Rated Capacity
S-093	PFRN01	Preheat Furnace #1	Natural Gas	0.024 MMcf/hr
S-095				0.024 MMcf/hr
S-094	PFRN02	Preheat Furnace #2	Natural Gas	0.030 MMcf/hr
S-278	PFRN12	Preheat Furnace #12	Natural Gas	0.020 MMcf/hr
S-279				0.020 MMcf/hr
S-275	PFRN13	Preheat Furnace #13	Natural Gas	0.020 MMcf/hr
S-276				0.020 MMcf/hr
S-115	PFRN16	Preheat Furnace #16	Natural Gas	0.021 MMcf/hr
S-116				0.021 MMcf/hr
S-113	PFRN17	Preheat Furnace #17	Natural Gas	0.021 MMcf/hr
S-114				0.021 MMcf/hr
S-111	PFRN18	Preheat Furnace #18	Natural Gas	0.024 MMcf/hr
S-112				0.024 MMcf/hr
S-109	PFRN19	Preheat Furnace #19	Natural Gas	0.023 MMcf/hr
S-110				0.023 MMcf/hr
S-107	PFRN20	Preheat Furnace #20	Natural Gas	0.023 MMcf/hr
S-108				0.023 MMcf/hr
S-105	PFRN21	Preheat Furnace #21	Natural Gas	0.023 MMcf/hr
S-106				0.023 MMcf/hr
S-103	PFRN22	Preheat Furnace #22	Natural Gas	0.023 MMcf/hr
S-104				0.023 MMcf/hr
S-102	PFRN23	Preheat Furnace #23	Natural Gas	0.030 MMcf/hr
S-100	PFRN24	Preheat Furnace #24	Natural Gas	0.024 MMcf/hr
S-101				0.024 MMcf/hr
S-294	PFRN25	Preheat Furnace #25	Natural Gas	0.024 MMcf/hr
S-295				0.024 MMcf/hr
S-296	PFRN26	Preheat Furnace #26	Natural Gas	0.024 MMcf/hr
S-297				0.024 MMcf/hr
S-325	PFRN27	Preheat Furnace #27	Natural Gas	0.024 MMcf/hr
S-326				0.024 MMcf/hr

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: Preheat Furnaces (Direct-Fired)

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### Applicable Requirements

EP = Emission Point

EU = Emission Unit

EP	EU	EU Description	Raw Material	Iowa DNR Construction Permit	Rated Capacity
S-118	PFRN14	Preheat Furnace #14	Natural Gas	97-A-251	0.033 MMcf/hr
S-117	PFRN15	Preheat Furnace #15	Natural Gas	97-A-250	0.033 MMcf/hr

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 15 %

Authority for Requirement: Iowa DNR Construction Permit Numbers 97-A-250 and 97-A-251  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit Numbers 97-A-250 and 97-A-251  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit Numbers 97-A-250 and 97-A-251  
567 IAC 23.3(3)"e"

### Operational Limits & Requirements

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Process throughput:

- Natural gas consumed by #14 and #15 preheat furnaces shall not exceed total 562 MMcf per year during each twelve (12) consecutive month period.

Authority for Requirement: Iowa DNR Construction Permits 97-A-250 and 97-A-251

**Reporting & Record keeping:**

The following records must be maintained on-site for five (5) years and be made available to the Department on request:

- Monthly natural gas usage by this furnace;
- Total natural gas consumption rate by #14 and #15 furnaces during each twelve (12) consecutive month period.

Authority for Requirement: Iowa DNR Construction Permits 97-A-250 and 97-A-251

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 72

Stack Diameter (inches): 54

Stack Exhaust Flow Rate (scfm): 5,300

Stack Temperature (°F): 325

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permits 97-A-250 and 97-A-251

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Stack Testing:**

Pollutant – Opacity

1st Stack Test to be Completed by (date) – February 25, 2007

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – 567 IAC 22.108(3)"b"

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-131**

### Associated Equipment

Associated Emission Unit ID Numbers: PNTS01

Emissions Control Equipment ID Number: PNTS01

Emissions Control Equipment Description: Air Filter/Paint Arrestors

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: PNTS01

Emission Unit Description: Maintenance Paint Booth

Raw Material/Fuel: Paint

Rated Capacity: 17 gallons/day

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (0%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 97-A-140S1  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.01 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 97-A-140S1  
567 IAC 23.4(13)

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### Process throughput:

- The amount of coatings used in the equipment administered under DNR permit 97-A-140S1 shall not exceed 17 gallons per day.

**Reporting & Record keeping:**

All records shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner or the operator of the equipment should keep appropriate record to show:

- The daily amount of coatings used in the equipment.

Authority for Requirement: Iowa DNR Construction Permit 97-A-140S1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 26.6

Stack Diameter (feet): 3.6

Stack Exhaust Flow Rate (scfm): 45,000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 97-A-140S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment: Particulate Matter

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Spray Booth Filter Agency Operation & Maintenance Plan**

**Weekly**

Inspect the spray booth system for conditions that reduce the operating efficiency of the collection system. This will include a visual inspection of the condition of the filter material.

Maintain a written record of the observation and any action resulting from the inspection.

**Record Keeping and Reporting**

Maintenance and inspection records will be kept for five years and be available upon request.

**Quality Control**

The filter equipment will be operated and maintained according to the manufacturer's recommendations.

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: Reheat Furnaces (Combustion)

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### Applicable Requirements

EP = Emission Point

EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
S-007	RFRN01	Reheat Furnace #1	Natural Gas	0.009 MMcf/hr
S-011	RFRN05	Reheat Furnace #5	Natural Gas	0.006 MMcf/hr
S-012	RFRN06	Reheat Furnace #6	Natural Gas	0.006 MMcf/hr
S-013	RFRN07	Reheat Furnace #7	Natural Gas	0.006 MMcf/hr
S-014	RFRN08	Reheat Furnace #8	Natural Gas	0.009 MMcf/hr
S-015	RFRN09	Reheat Furnace #9	Natural Gas	0.009 MMcf/hr
S-016	RFRN10	Reheat Furnace #10	Natural Gas	0.009 MMcf/hr
S-017	RFRN11	Reheat Furnace #11	Natural Gas	0.009 MMcf/hr
S-018	RFRN12	Reheat Furnace #12	Natural Gas	0.009 MMcf/hr
S-019	RFRN13	Reheat Furnace #13	Natural Gas	0.011 MMcf/hr
S-020	RFRN14	Reheat Furnace #14	Natural Gas	0.011 MMcf/hr
S-021	RFRN15	Reheat Furnace #15	Natural Gas	0.013 MMcf/hr
S-074	RFRN20	Reheat Furnace #20	Natural Gas	0.013 MMcf/hr
S-073	RFRN21	Reheat Furnace #21	Natural Gas	0.014 MMcf/hr
S-072	RFRN22	Reheat Furnace #22	Natural Gas	0.014 MMcf/hr
S-070	RFRN24	Reheat Furnace #24	Natural Gas	0.015 MMcf/hr

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: HR1**

### Associated Equipment

Associated Emission Unit ID Numbers: ROAD01 and ROAD02

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: ROAD01

Emission Unit Description: Haul Road/Trucks

Raw Material/Fuel: Vehicle Miles Traveled (VMT)

Rated Capacity: 3.427 VMT/hr

Emission Unit vented through this Emission Point: ROAD02

Emission Unit Description: Haul Road/Trucks

Raw Material/Fuel: Vehicle Miles Traveled (VMT)

Rated Capacity: 3.425 VMT/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-099**

### Associated Equipment

Associated Emission Unit ID Numbers: SCLP03

Emissions Control Equipment ID Number: SCLP099

Emissions Control Equipment Description: Baghouse

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: SCLP03

Emission Unit Description: Scalper #3

Raw Material/Fuel: Metal

Rated Capacity: 1.62 tons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10 %) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 01-A-216  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 3.28 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-216

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-216  
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter

Emission Limit(s): 5.57 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-216

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 115

Stack Diameter (inches): 84

Stack Exhaust Flow Rate (scfm): 62,250

Stack Temperature (°F): 70

Discharge Style: Vertical without raincap

Authority for Requirement: Iowa DNR Construction Permit 01-A-216

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment: PM<sub>10</sub> & Particulate Matter

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-261**

### Associated Equipment

Associated Emission Unit ID Numbers: SCLP04

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: SCLP04

Emission Unit Description: Scalper #4

Raw Material/Fuel: Metal

Rated Capacity: Scalper can process ingots of varying widths and lengths.

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> If visible emissions are observed other than startup, shutdown, or malfunction, a stack

Test may be required to demonstrate compliance with the particulate matter standard.

Authority for Requirement: Iowa DNR Construction Permit 79-A-186-S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 2.78 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 79-A-186-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 67.42

Stack Diameter (inches): 84

Stack Exhaust Flow Rate (scfm): 31,000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 79-A-186S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-262**

### Associated Equipment

Associated Emission Unit ID Numbers: SCLP04

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: SCLP04

Emission Unit Description: Scalper #4

Raw Material/Fuel: Metal

Rated Capacity: Scalper can process ingots of varying widths and lengths.

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> If visible emissions are observed other than startup, shutdown, or malfunction, a stack

Test may be required to demonstrate compliance with the particulate matter standard.

Authority for Requirement: Iowa DNR Construction Permit 79-A-187S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 2.78 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 79-A-187S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: 567 IAC 23.3(2)"a"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 67.42

Stack Diameter (inches): 84

Stack Exhaust Flow Rate (scfm): 31,000

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 79-A-187S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-298**

### Associated Equipment

Associated Emission Unit ID Numbers: SHLT01

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: SHLT01

Emission Unit Description: Scrap Conveyor System Exhaust

Raw Material/Fuel: Metal

Rated Capacity: 100,000 lbs./hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (0%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 90-A-363S1  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 3.29 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 90-A-363S1

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 90-A-363S1  
567 IAC 23.3(2)"a"

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (from the ground): 35 feet, 3-7/8 inches

Stack Diameter (inches): 21.5

Stack Exhaust Flow Rate (scfm): 8,500

Stack Temperature (°F): 120

Discharge Style: Vertical with obstructive discharge

Authority for Requirement: Iowa DNR Construction Permit 90-A-363S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-338**

### Associated Equipment

Associated Emission Unit ID Numbers: SKIM  
Emissions Control Equipment ID Number: SKIM0338  
Emissions Control Equipment Description: Baghouse

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: SKIM  
Emission Unit Description: Skim House (Ingot Plant)  
Raw Material/Fuel: Skim Dust  
Rated Capacity: 2.50 tons/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (10 %) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 01-A-217  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 3.28 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-217

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-217  
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter

Emission Limit(s): 5.57 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-217

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 65

Stack Diameter (inches): 60

Stack Exhaust Flow Rate (scfm): 83,600

Stack Temperature (°F): 100

Discharge Style: Vertical without raincap

Authority for Requirement: Iowa DNR Construction Permit 01-A-217

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

#### **Stack Testing:**

Pollutant – PM<sub>10</sub>

1st Stack Test to be Completed by (date) – August 25, 2005

Test Method – 201A with 202, 40 CFR 51

Authority for Requirement – 567 IAC 22.108(3)"b"

Pollutant – Particulate Matter

1st Stack Test to be Completed by (date) – August 25, 2005

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement – 567 IAC 22.108(3)"b"

*The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐**

Relevant requirements of O & M plan for this equipment: PM<sub>10</sub> & Particulate Matter

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Number: Heat Treat

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### Applicable Requirements

EP = Emission Point

EU = Emission Unit

EP	EU	EU Description	Raw Material	Rated Capacity
S-068	TFRN10	#10 Heat Treat Furnace	Natural Gas	0.008 MMcf/hr
S-069	TFRN11	#11 Heat Treat Furnace	Natural Gas	0.012 MMcf/hr
S-259	TFRN12	#12 Heat Treat Furnace	Natural Gas	0.020 MMcf/hr
S-160	TFRN50	50" Continuous Heat Treat Line	Natural Gas	0.005 MMcf/hr
S-162	TFRN50	50" Continuous Heat Treat Line	Natural Gas	0.005 MMcf/hr
S-172	TFRN86	86" Continuous Heat Treat Furnace	Natural Gas	0.005 MMcf/hr
S-176	TFRN86	86" Continuous Heat Treat Furnace	Natural Gas	0.005 MMcf/hr
S-177	TFRN86	86" Continuous Heat Treat Furnace	Natural Gas	0.005 MMcf/hr
S-178	TFRN86	86" Continuous Heat Treat Furnace	Natural Gas	0.005 MMcf/hr
S-179	TFRN86	86" Continuous Heat Treat Furnace	Natural Gas	0.005 MMcf/hr
S-180	TFRN86	86" Continuous Heat Treat Furnace	Natural Gas	0.005 MMcf/hr

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40 %

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

### Periodic Monitoring Requirements

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-327, S-328, S-329, and S-330**

### Associated Equipment

Associated Emission Unit ID Numbers: TFRN14

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TFRN14

Emission Unit Description: #14 Heat Treat Furnace

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.016 MMcf/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.96 tons/year total for Emission Points S-327, S-328, S-329 and S-330

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

Pollutant: PM

Emission Limit(s): 0.96 tons/year total for Emission Points S-327, S-328, S-329 and S-330

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 0.04 tons/year total for Emission Points S-327, S-328, S-329 and S-330

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Dioxide (NO<sub>2</sub>)

Emission Limit(s): 9.8 tons/year total for Emission Points S-327, S-328, S-329 and S-330

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.20 tons/year total for Emission Points S-327, S-328, S-329 and S-330

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 2.8 tons/year total for Emission Points S-327, S-328, S-329 and S-330

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- Fuel usage in the No. 14 Vertical Heat Treat Furnace shall be limited to natural gas.
- Annual usage of natural gas in the No. 14 Vertical Heat Treat Furnace shall be limited to 140.16 million cubic feet, as determined by monthly rolling total.
- Quantities of fuel usage in the No. 14 Vertical Heat Treat Furnace shall be determined by non-resettable natural gas metering device(s).

#### **Reporting & Record keeping:**

All records, as required below, shall be kept on-site for five (5) years and be made available upon request.

- Annual usage of natural gas in cubic feet shall be recorded each month.

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**The source shall be connected to four stacks, each designated as below.**

Stack Height (feet): 78.61

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (acfm): 15,045

Stack Temperature (°F): 600

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 95-A-638

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-333**

### Associated Equipment

Associated Emission Unit ID Numbers: TFRN15

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TFRN15

Emission Unit Description: #15 Heat Treat Furnace

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.033 MMcf/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 2.0 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-812

Pollutant: PM

Emission Limit(s): 2.0 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-812

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 0.09 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-812

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Dioxide (NO<sub>2</sub>)

Emission Limit(s): 31.0 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-812

Pollutant: Volatile Organic Compounds (VOC)  
Emission Limit(s): 0.41 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 95-A-812

Pollutant: Carbon Monoxide (CO)  
Emission Limit(s): 5.1 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 95-A-812

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- Fuel usage in the No. 15 Horizontal Heat Treat Furnace shall be limited to natural gas.
- Annual usage of natural gas in the No. 15 Horizontal Heat Treat Furnace shall be limited to 289.08 million cubic feet, as determined by monthly rolling total.
- Quantities of fuel usage in the No. 15 Horizontal Heat Treat Furnace shall be determined by non-resettable natural gas metering device(s).

#### **Reporting & Record keeping:**

All records, as required below, shall be kept on-site for five (5) years and be made available upon request.

- Annual usage of natural gas in cubic feet shall be recorded each month.

Authority for Requirement: Iowa DNR Construction Permit 95-A-812

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 65.81

Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 19,282

Stack Temperature (°F): 480

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 95-A-812

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-340**

### Associated Equipment

Associated Emission Unit ID Numbers: TFRN16

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TFRN16

Emission Unit Description: #16 Heat Treat Furnace

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.050 MMcf/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%<sup>(1)</sup>

<sup>(1)</sup> Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Authority for Requirement: Iowa DNR Construction Permit 01-A-879

Pollutant: PM<sub>10</sub>

Emission Limit(s): 0.76 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-879

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-879  
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter

Emission Limit(s): 0.76 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-879

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 01-A-879  
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Dioxide (NO<sub>2</sub>)

Emission Limit(s): 10.0 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-879  
567 IAC 23.3(3)"e"

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Process throughput:**

- A. This unit shall operate on natural gas only.
- B. The total amount of natural gas used by this unit shall not exceed 200,000,000 cubic feet per 12-month rolling period.

#### **Reporting & Record keeping:**

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. For the first twelve (12) months of operation, determine the total amount of natural gas used for each month of operation.
- B. After the first twelve (12) months of operation, determine the cumulative amount natural gas used on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 01-A-879

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 71.5

Stack Diameter (inches): 49.25

Stack Exhaust Flow Rate (scfm): 18,000

Stack Temperature (°F): 480

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 01-A-879

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

**Emission Point ID Number: T-044**

Associated Equipment

Associated Emission Unit ID Numbers: TNKA0044

Emissions Control Equipment ID Number: none

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**Applicable Requirements**

Emission Unit vented through this Emission Point: TNKA0044

Emission Unit Description: Storage Tank (100,000 gallons) Rolling Emulsion

Raw Material/Fuel: Rolling Emulsion

Rated Capacity: 100,000 gallons

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No emission limits at this time.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: T-129**

### Associated Equipment

Associated Emission Unit ID Numbers: TNKA0129

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TNKA0129

Emission Unit Description: Storage Tank (402,369gallons) Fuel Oil

Raw Material/Fuel: Fuel Oil

Rated Capacity: 402,369 gallons

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No emission limits at this time.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Reporting & Record keeping:**

The owner or operator shall keep copies of the following records for the life of the source:

- The holder of Iowa DNR Construction Permit 93-A-304 must keep readily accessible records showing the dimensions of the storage vessel and the capacity.

Authority for Requirement: Iowa DNR Construction Permit 93-A-304  
40 CFR 60.116b Subpart Kb – Standards of Performance for  
Volatile Organic Liquid Storage Vessels  
567 IAC 23.1(2)"d"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 31

Stack Diameter (feet): 47

Capacity: 402,369 gallons (1,534 cubic meters)

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 93-A-304

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: T-130**

### Associated Equipment

Associated Emission Unit ID Numbers: TNKA0130

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TNKA0130

Emission Unit Description: Storage Tank (402,369 gallons) Used Oil

Raw Material/Fuel: Used Oil

Rated Capacity: 402,369 gallons

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No emission limits at this time.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Reporting & Record keeping:**

The owner or operator shall keep copies of the following records for the life of the source:

- The holder of Iowa DNR Construction Permit 93-A-305 must keep readily accessible records showing the dimensions of the storage vessel and the capacity.

Authority for Requirement: Iowa DNR Construction Permit 93-A-305  
40 CFR 60.116b Subpart Kb – Standards of Performance for  
Volatile Organic Liquid Storage Vessels  
567 IAC 23.1(2)"d"

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 31

Stack Diameter (feet): 47

Capacity: 402,369 gallons (1,534 cubic meters)

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 93-A-305

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: T-141**

### Associated Equipment

Associated Emission Unit ID Numbers: TNKA0141

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TNKA0141

Emission Unit Description: Storage Tank (2,000 gallons) Gasoline

Raw Material/Fuel: Gasoline

Rated Capacity: 2,000 gallons

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1 ton/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-436

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: T-142**

### Associated Equipment

Associated Emission Unit ID Numbers: TNKA0142

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TNKA0142

Emission Unit Description: Storage Tank (2,000 gallons) Diesel Fuel

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 2,000 gallons

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1 ton/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-437

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: T-0223**

### Associated Equipment

Associated Emission Unit ID Numbers: TNKA0223

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TNKA0223

Emission Unit Description: Storage Tank (36,000 gallons) Oily Waste

Raw Material/Fuel: Oily Waste

Rated Capacity: 36,000 gallons

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

No emission limits at this time.

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### Process throughput:

A. The material stored in this tank shall not have a vapor pressure that exceeds 15.0 kPa.

#### Reporting & Record keeping:

All records shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The records shall show the following:

- A. A Material Safety Data Sheet (MSDS) for any material stored in the tank.
- B. The vapor pressure of any material stored in the tank.
- C. During the first twelve (12) months of operation, determine the cumulative throughput of material for each month of operation.
- D. After the first twelve (12) months of operation, determine the annual throughput of material on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 99-A-969

The owner or operator shall keep copies of the following records for the life of the source:

- A. As required by Subpart Kb of NSPS, readily accessible records showing the dimensions of the storage vessel and the capacity of the tank shall be kept.

Authority for Requirement: Iowa DNR Construction Permit 99-A-969  
40 CFR 60.116b Subpart Kb – Standards of Performance for  
Volatile Organic Liquid Storage Vessels  
567 IAC 23.1(2)"d"

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet from the ground): 38.83

Stack Diameter (inches): 6

Stack Exhaust Flow Rate (scfm): 0

Stack Temperature (°F): 70

Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 99-A-969

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: Miscellaneous Storage Tanks

### Associated Equipment

Associated Emission Unit ID Numbers: See Below

Emissions Control Equipment ID Number: See Below

Emissions Control Equipment Description: See Below

### **Applicable Requirements**

*EU = Emission Unit CE = Control Equipment*

EP	EU	EU Description	Raw Material	Rated Capacity	CE
T-080	TNKA0080	Storage Tank (30,000 gallons) Used Oil	Used Oil	30,000 gallons	None
T-102	TNKA0102	Storage Tank (30,000 gallons) Rolling Lubricant	Used Oil	30,000 gallons	None
T-120	TNKA0120	Storage Tank (12,000 gallons) Rolling Lubricant	Rolling Lubricant	12,000 gallons	None
T-121	TNKA0121	Storage Tank (12,000 gallons) Rolling Lubricant	Rolling Lubricant	12,000 gallons	None
T-122	TNKA0122	Storage Tank (12,000 gallons) Rolling Lubricant	Rolling Lubricant	12,000 gallons	None
T-123	TNKA0123	Storage Tank (12,000 gallons) Rolling Lubricant	Rolling Lubricant	12,000 gallons	None
T-124	TNKA0124	Storage Tank (12,000 gallons) Rolling Lubricant	Rolling Lubricant	12,000 gallons	None
T-125 <sup>(1)</sup>	TNKA0125	Storage Tank (15,000 gallons) Rolling Lubricant	Rolling Lubricant	15,000 gallons	None
T-126 <sup>(1)</sup>	TNKA0126	Storage Tank (15,000 gallons) Rolling Lubricant	Rolling Lubricant	15,000 gallons	None
T-127 <sup>(1)</sup>	TNKA0127	Storage Tank (15,000 gallons) Rolling Lubricant	Rolling Lubricant	15,000 gallons	None
T-176 <sup>(1)</sup>	TNKA0176	Storage Tank (15,200 gallons) UF Concentrate	UF Concentrate	15,200 gallons	None
T-177 <sup>(1)</sup>	TNKA0177	Storage Tank (15,200 gallons) Fuel Oil	Fuel Oil	15,200 gallons	None
T-182 <sup>(1)</sup>	TNKA0182	Storage Tank (15,200 gallons) Fuel Oil	Fuel Oil	15,200 gallons	None
T-228	TNKA0228	Storage Tank (12,000 gallons) Rolling Lubricant	Rolling Lubricant	12,000 gallons	None
T-229	TNKA0229	Storage Tank (12,000 gallons) Rolling Lubricant	Rolling Lubricant	12,000 gallons	None

<sup>(1)</sup> Does not vent to the outside.

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

No emission limits at this time.

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Reporting & Record keeping:**

The owner or operator shall keep copies of the following records for the life of the source:

- A. As required by Subpart Kb of NSPS, readily accessible records showing the dimensions of the storage vessel and the capacity of the tank shall be kept.

Authority for Requirement: 40 CFR 60.116b Subpart Kb – Standards of Performance  
for Volatile Organic Liquid Storage Vessels  
567 IAC 23.1(2)"d"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-323**

### Associated Equipment

Associated Emission Unit ID Numbers: TTST12

Emissions Control Equipment ID Number: none

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: TTST12

Emission Unit Description: Truck Maintenance Vehicle Engine Exhaust

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 124.56 hp-hr/hr

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20%

Authority for Requirement: Iowa DNR Construction Permit 97-A-145  
567 IAC 23.3(2)"d"

Pollutant: PM<sub>10</sub>

Emission Limit(s): 2.24 lbs./hr

Authority for Requirement: Iowa DNR Construction Permit 97-A-145

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 97-A-145  
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 97-A-145

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Hours of operation:**

- The hours of operation of the equipment administered under DNR permit 97-A-145 shall not exceed 6.5 hours per day.

#### **Reporting & Record keeping:**

- The permit holder shall maintain records on the premises to show the daily hours of operation of the equipment administered under DNR permit 97-A-145. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 97-A-145

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (feet): 30.8

Stack Diameter (inches): 31

Stack Exhaust Flow Rate (scfm): 8,400

Stack Temperature (°F): 100

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 97-A-145

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-163**

### Associated Equipment

Associated Emission Unit ID Numbers: WWRK01  
Emissions Control Equipment ID Number: WWRK0163  
Emissions Control Equipment Description: Cyclone

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: WWRK01  
Emission Unit Description: Sawdust Collector  
Raw Material/Fuel: Sawdust  
Rated Capacity: 0.038 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 40%  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limit(s): 0.46 lb./hr<sup>(1)</sup>  
<sup>(1)</sup> based on a process weight rate of 0.038 ton/hr  
Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## **Emission Point ID Number: S-133**

### Associated Equipment

Associated Emission Unit ID Numbers: WWRK02  
Emissions Control Equipment ID Number: WWRK0133  
Emissions Control Equipment Description: Cyclone

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### **Applicable Requirements**

Emission Unit vented through this Emission Point: WWRK02  
Emission Unit Description: Sawdust Collector  
Raw Material/Fuel: Sawdust  
Rated Capacity: 0.038 ton/hr

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 40%  
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limit(s): 0.46 lb./hr<sup>(1)</sup>  
<sup>(1)</sup> based on a process weight rate of 0.038 ton/hr  
Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: FUG-GP

### Associated Equipment

Associated Emission Unit ID Numbers: See Below

Emissions Control Equipment ID Number: See Below

Emissions Control Equipment Description: See Below

### Applicable Requirements

*EU = Emission Unit CE = Control Equipment*

EU	EU Description	Raw Material	Rated Capacity	CE	CE Description
AFRNCR08	Air Annealing Furnace #8	Metal & Natural Gas	0.005 MMcf/hr	-	-
AFRNCR09	Air Annealing Furnace #9	Metal & Natural Gas	0.005 MMcf/hr	-	-
AFRNCR10	Air Annealing Furnace #10	Metal & Natural Gas	0.005 MMcf/hr	-	-
CFRN01	CAA Furnace #1	Metal & Natural Gas	0.005 MMcf/hr	-	-
CFRN02	CAA Furnace #2	Metal & Natural Gas	0.005 MMcf/hr	-	-
CFRN03	CAA Furnace #3	Metal & Natural Gas	0.005 MMcf/hr	-	-
CFRN11	CAA Furnace #11	Metal & Natural Gas	0.005 MMcf/hr	-	-
CFRN12	CAA Furnace #12	Metal & Natural Gas	0.005 MMcf/hr	-	-
CFRN18	CAA Furnace #18	Metal & Natural Gas	0.010 MMcf/hr	-	-
CFRN19	CAA Furnace #19	Metal & Natural Gas	0.010 MMcf/hr	-	-
CFRN20	CAA Furnace #20	Metal & Natural Gas	0.010 MMcf/hr	-	-
CFRN21	CAA Furnace #21	Metal & Natural Gas	0.010 MMcf/hr	-	-
CFRN25	CAA Furnace #25	Metal & Natural Gas	0.013 MMcf/hr	-	-
CFRN26	CAA Furnace #26	Metal & Natural Gas	0.013 MMcf/hr	-	-
CFRN27	CAA Furnace #27	Metal & Natural Gas	0.005 MMcf/hr	-	-
CFRN28	CAA Furnace #28	Metal & Natural Gas	0.012 MMcf/hr	-	-
CFRN29	CAA Furnace #29	Metal & Natural Gas	0.010 MMcf/hr	-	-
CFRN50	CAA Furnace #50	Metal & Natural Gas	0.002 MMcf/hr	-	-
CFRN51	CAA Furnace #51	Metal & Natural Gas	0.002 MMcf/hr	-	-
CFRN52	CAA Furnace #52	Metal & Natural Gas	0.010 MMcf/hr	-	-
CFRN53	CAA Furnace #53	Metal & Natural Gas	0.010 MMcf/hr	-	-
CFRN54	CAA Furnace #54	Metal & Natural Gas	0.002 MMcf/hr	-	-
CMIL01	#1 Cold Mill	Metal	(1)	CMIL0287	Cyclonic Separator
CMIL03	#3 Cold Mill	Metal	(1)	CMIL0165	Demister
CMIL07	#7 Cold Mill	Metal	(1)	CMILO169	Demister
CSTD60	60" Cont Stretch Wash Unit	Perchloroethylene	13.17 gallons/hr	CSTD0158	Carbon Adsorber
CTLL02	#1 & #2 – 84" Coil Finish Wash Line	Perchloroethylene	16.32 gallons/hr	CTLL0175	Carbon Adsorber
FUG_GP_V1	Stores/Off Site Consumption Fugitives	Volatile Organic Liquid	0.07 tons/hr	-	-
FUG_GP_V2	Stores/Off Site Consumption Fugitives	Organic Based Liquid	0.14 tons/hr	-	-
FUG_GP_V3	Stores/Off Site Consumption Fugitives	Heavy Organic Liquid	0.07 tons/hr	-	-

EU	EU Description	Raw Material	Rated Capacity	CE	CE Description
OILH01	#1 Cold Mill Oil House	Coolant	(1)	-	-
OILH03	#3 Cold Mill Oil House	Coolant	(1)	-	-
OILH07	#7 Cold Mill Oil House	Coolant	(1)	-	-
FUG-GP	#14 Heat Treat Furnace	Metal	0.016 MMcf/hr	-	-

<sup>(1)</sup> Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: FUG-B7XX

### Associated Equipment

Associated Emission Unit ID Numbers: See Below

Emissions Control Equipment ID Number: See Below

Emissions Control Equipment Description: See Below

### Applicable Requirements

*EU = Emission Unit CE = Control Equipment*

EU	EU Description	Raw Material	Rated Capacity	CE	CE Description
AFRNL02	#2 F.M. Annealing Furnace	Metal & Natural Gas	0.002 MMcf/hr	-	-
AFRNL03	#3 F.M. Annealing Furnace	Metal & Natural Gas	0.002 MMcf/hr	-	-
AFRNL04	#4 F.M. Annealing Furnace	Metal & Natural Gas	0.002 MMcf/hr	-	-
AFRNL05	#5 F.M. Annealing Furnace	Metal & Natural Gas	0.002 MMcf/hr	-	-
AFRNL06	#6 F.M. Annealing Furnace	Metal & Natural Gas	0.003 MMcf/hr	-	-
AFRNL07	#7 F.M. Annealing Furnace	Metal & Natural Gas	0.003 MMcf/hr	-	-
AFRNL08	#8 F.M. Annealing Furnace	Metal & Natural Gas	0.003 MMcf/hr	-	-
AFRNL09	#9 F.M. Annealing Furnace	Metal & Natural Gas	0.008 MMcf/hr	-	-
LMIL01	#1 Light Rolling Mill	Metal	<sup>(1)</sup>	LMIL0201	Demister
LMIL02	#2 Light Rolling Mill	Metal	<sup>(1)</sup>	LMIL0203	Demister

<sup>(1)</sup> Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### Periodic Monitoring Requirements

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: FUG-HL

### Associated Equipment

Associated Emission Unit ID Numbers: See Below

Emissions Control Equipment ID Number: See Below

Emissions Control Equipment Description: See Below

### Applicable Requirements

*EU = Emission Unit CE = Control Equipment*

EU	EU Description	Raw Material	Rated Capacity	CE	CE Description
HMIL10	100" 5 Stand Hot Mill	Metal	(1)	HMIL0288 HMIL0289	Centrifugal Mist Eliminators
HMIL14	144" 5 Stand Hot Mill	Metal	(1)	-	-
HMIL16	160" Hot Mill	Metal	(1)	-	-
HMIL22	220" Hot Mill Line	Metal	(1)	HMIL0119 HMIL0120	Chevron Screens (Mist Eliminators)
HMILPH	PAHTS 144" Taper Mill	Metal	(1)	HMIL0071	Demister
PNRN01	Preheat Furnace #1	Ammonium Fluorobrate & Natural Gas	0.030 MMcf/hr	-	-
PNRN02	Preheat Furnace #1	Ammonium Fluorobrate & Natural Gas	0.049 MMcf/hr	-	-
PNRN12	Preheat Furnace #12	Ammonium Fluorobrate & Natural Gas	0.040 MMcf/hr	-	-
PNRN13	Preheat Furnace #13	Ammonium Fluorobrate & Natural Gas	0.040 MMcf/hr	-	-
PNRN16	Preheat Furnace #16	Ammonium Fluorobrate & Natural Gas	0.042 MMcf/hr	-	-
PNRN17	Preheat Furnace #17	Ammonium Fluorobrate & Natural Gas	0.041 MMcf/hr	-	-
PNRN18	Preheat Furnace #18	Ammonium Fluorobrate & Natural Gas	0.048 MMcf/hr	-	-
PNRN19	Preheat Furnace #19	Ammonium Fluorobrate & Natural Gas	0.046 MMcf/hr	-	-
PNRN20	Preheat Furnace #20	Ammonium Fluorobrate & Natural Gas	0.046 MMcf/hr	-	-
PNRN21	Preheat Furnace #21	Ammonium Fluorobrate & Natural Gas	0.046 MMcf/hr	-	-
PNRN22	Preheat Furnace #22	Ammonium Fluorobrate & Natural Gas	0.046 MMcf/hr	-	-
PNRN23	Preheat Furnace #23	Ammonium Fluorobrate & Natural Gas	0.030 MMcf/hr	-	-
PNRN24	Preheat Furnace #24	Ammonium Fluorobrate & Natural Gas	0.047 MMcf/hr	-	-

EU	EU Description	Raw Material	Rated Capacity	CE	CE Description
PNRN25	Preheat Furnace #25	Ammonium Fluoroborate & Natural Gas	0.047 MMcf/hr	-	-
PNRN26	Preheat Furnace #26	Ammonium Fluoroborate & Natural Gas	0.047 MMcf/hr	-	-
PNRN27	Preheat Furnace #27	Ammonium Fluoroborate & Natural Gas	0.047 MMcf/hr	-	-

<sup>(1)</sup> Rolling Mill can process aluminum ingot to aluminum sheets with varying widths and lengths.

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

**Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒**

**Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒**

Authority for Requirement: 567 IAC 22.108(3)"b"

## Emission Point ID Numbers: FUG-IP

### Associated Equipment

Associated Emission Unit ID Numbers: See Below

Emissions Control Equipment ID Number: None

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### **Applicable Requirements**

*EU = Emission Unit*

EU	EU Description	Raw Material	Rated Capacity
FILT14	#14 In-Line Fluxer Filter Box	Natural Gas	0.0002 MMcf/hour
FILT15	#15 In-Line Fluxer Filter Box	Natural Gas	0.0006 MMcf/hour
FILT16	#16 In-Line Fluxer Filter Box	Natural Gas	0.0006 MMcf/hour

### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from these emission points shall not exceed the levels specified below.*

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

### **Periodic Monitoring Requirements**

*The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.*

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

## **IV. General Conditions**

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

### **G1. Duty to Comply**

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

### **G2. Permit Expiration**

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

### **G3. Certification Requirement for Title V Related Documents**

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

### **G4. Annual Compliance Certification**

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance

at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

#### **G5. Semi-Annual Monitoring Report**

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

#### **G6. Annual Fee**

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
  - a. Form 1.0 "Facility Identification";
  - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
  - c. Form 5.0 "Title V annual emissions summary/fee"; and
  - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
  - a. Form 1.0 "Facility Identification";
  - b. Form 5.0 "Title V annual emissions summary/fee";
  - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

**G7. Inspection of Premises, Records, Equipment, Methods and Discharges**

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

**G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

**G9. General Maintenance and Repair Duties**

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

**G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
  - b. Maintain a log at the permitted facility of the scenario under which it is operating.
  - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

**G11. Evidence used in establishing that a violation has or is occurring.**

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
  - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
  - b. Compliance test methods specified in 567 Chapter 25; or
  - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a. Any monitoring or testing methods provided in these rules; or
  - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

**G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

**G13. Hazardous Release**

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

**G14. Excess Emissions and Excess Emissions Reporting Requirements**

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

## 2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

#### **G15. Permit Deviation Reporting Requirements**

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

#### **G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations**

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

#### **G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification**

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
  - i. A brief description of the change within the permitted facility,
  - ii. The date on which the change will occur,
  - iii. Any change in emission as a result of that change,
  - iv. The pollutants emitted subject to the emissions trade
  - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
  - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
  - vii. Any permit term or condition no longer applicable as a result of the change.

*567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*

6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

#### **G18. Duty to Modify a Title V Permit**

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
  - i. Correct typographical errors
  - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - iii. Require more frequent monitoring or reporting by the permittee; or
  - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

## 2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
  - i. Do not violate any applicable requirements
  - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
  - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
  - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
  - v. Are not modifications under any provision of Title I of the Act; and
  - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
  - ii. The permittee's suggested draft permit
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
  - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

#### **G19. Duty to Obtain Construction Permits**

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

#### **G20. Asbestos**

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

#### **G21. Open Burning**

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

#### **G22. Acid Rain (Title IV) Emissions Allowances**

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

#### **G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements**

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

## **G24. Permit Reopenings**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
  - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
  - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
  - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

## **G25. Permit Shield**

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

**G26. Severability**

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

**G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

**G28. Transferability**

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

**G29. Disclaimer**

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

**G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification**

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

*567 IAC 25.1(7)"a", 567 IAC 25.1(9)*

### **G31. Prevention of Air Pollution Emergency Episodes**

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

*567 IAC 26.1(1)*

### **G32. Contacts List**

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits  
EPA Region 7  
Air Permits and Compliance Branch  
901 N. 5<sup>th</sup> Street  
Kansas City, KS 66101  
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

#### **Field Office 1**

909 West Main – Suite 4  
Manchester, IA 52057  
(563) 927-2640

#### **Field Office 2**

P.O. Box 1443  
2300-15th St., SW  
Mason City, IA 50401  
(641) 424-4073

#### **Field Office 3**

1900 N. Grand Ave.  
Spencer, IA 51301  
(712) 262-4177

#### **Field Office 4**

1401 Sunnyside Lane  
Atlantic, IA 50022  
(712) 243-1934

**Field Office 5**

401 SW 7<sup>th</sup> Street, Suite I  
Des Moines, IA 50309  
(515) 725-0268

**Field Office 6**

1004 W. Madison  
Washington, IA 52353  
(319) 653-2135

**Polk County Public Health Dept.**

Air Quality Division  
5885 NE 14th St.  
Des Moines, IA 50313  
(515) 286-3351

**Linn County Public Health Dept.**

Air Pollution Control Division  
501 13th St., NW  
Cedar Rapids, IA 52405  
(319) 892-6000

## **V. Subpart RRR--National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production**

The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart RRR National Emission Standards for Secondary Aluminum Production - 567 IAC 23.1(4)"br".

The following emission sources are subject to Subpart RRR:

<b>EP</b>	<b>EU</b>	<b>EU Description</b>	<b>Regulated As</b>
S-273	FILT02	#2 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-285	FILT03	#3 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-292	FILT04	#4 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-044	FILT14	#14 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-341	FILT17	#17 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-342	FILT18	#18 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-272	HFRN02	#2 Holding Furnace	Existing Group 1 Furnace
S-284	HFRN03	#3 Holding Furnace	Existing Group 1 Furnace
S-291	HFRN04	#4 Holding Furnace	Existing Group 1 Furnace
S-043	HFRN14	#14 Holding Furnace	Existing Group 1 Furnace
S-047	HFRN15	#15 Holding Furnace	Existing Group 1 Furnace
S-047	FILT15	#15 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-050	HFRN16	#16 Holding Furnace	Existing Group 1 Furnace
S-050	FILT16	#16 In-Line Fluxer Filter Box	Existing In-Line Fluxer
S-052	HFRN17	#17 Holding Furnace	Existing Group 1 Furnace
S-057	HFRN18	#18 Holding Furnace	Existing Group 1 Furnace
S-271	MFRN02	#2 Melting Furnace	Existing Group 1 Furnace
S-283	MFRN03	#3 Melting Furnace	Existing Group 1 Furnace
S-290	MFRN04	#4 Melting Furnace	Existing Group 1 Furnace
S-040	MFRN13	#13 Melting Furnace	Existing Group 1 Furnace
S-045	MFRN14	#14 Melting Furnace	Existing Group 1 Furnace
S-048	MFRN15	#15 Melting Furnace	Existing Group 1 Furnace
S-049	MFRN16	#16 Melting Furnace	Existing Group 1 Furnace
S-053	MFRN17	#17 Melting Furnace	Existing Group 1 Furnace
S-056	MFRN18	#18 Melting Furnace	Existing Group 1 Furnace

Excerpts of the applicable Subpart RRR Requirements are shown below:

*(Note: Citation numbering is consistent with 40 CFR Part 63. Requirements to which Alcoa is not subject have been removed. These citations are provided for reference only. If the Subpart RRR Requirements are modified in the future, Alcoa is responsible for demonstrating compliance with 40 CFR 63 Subpart RRR as printed in the Federal Register regardless of whether the citations listed below are modified.)*

**Sec. 63.1501 Dates.**

(a) The owner or operator of an existing affected source must comply with the requirements of this subpart by March 24, 2003.

**Sec. 63.1505 Emission standards for affected sources and emission units.**

(a) Summary. The owner or operator of a new or existing affected source must comply with each applicable limit in this section. Table 1 to this subpart summarizes the emission standards for each type of source.

(i) Group 1 furnace. The owner or operator of a group 1 furnace must use the limits in this paragraph to determine the emission standards for a SAPU.

- (1) 0.20 kg of PM per Mg (0.40 lb of PM per ton) of feed/charge from a group 1 furnace, that is not a melting/holding furnace processing only clean charge, at a secondary aluminum production facility that is a major source;
- (2) 0.40 kg of PM per Mg (0.80 lb of PM per ton) of feed/charge from a group 1 melting/holding furnace processing only clean charge at a secondary aluminum production facility that is a major source;
- (3) 15  $\mu\text{g}$  of D/F TEQ per Mg ( $2.1 \times 10^{-4}$  gr of D/F TEQ per ton) of feed/charge from a group 1 furnace at a secondary aluminum production facility that is a major or area source. This limit does not apply if the furnace processes only clean charge; and
- (4) 0.20 kg of HCl per Mg (0.40 lb of HCl per ton) of feed/charge or, if the furnace is equipped with an add-on air pollution control device, 10 percent of the uncontrolled HCl emissions, by weight, for a group 1 furnace at a secondary aluminum production facility that is a major source.
- (6) The owner or operator may determine the emission standards for a SAPU by applying the group 1 furnace limits on the basis of the aluminum production weight in each group 1 furnace, rather than on the basis of feed/charge.

(j) In-line fluxer. Except as provided in paragraph (j)(3) of this section for an in-line fluxer using no reactive flux material, the owner or operator of an in-line fluxer must use the limits in this paragraph to determine the emission standards for a SAPU.

- (1) 0.02 kg of HCl per Mg (0.04 lb of HCl per ton) of feed/charge;
- (2) 0.005 kg of PM per Mg (0.01 lb of PM per ton) of feed/charge.
- (3) The emission limits in paragraphs (j)(1) and (j)(2) of this section do not apply to an in-line fluxer that uses no reactive flux materials.

- (5) The owner or operator may determine the emission standards for a SAPU by applying the in-line fluxer limits on the basis of the aluminum production weight in each in-line fluxer, rather than on the basis of feed/charge.

(k) Secondary aluminum processing unit. On and after the compliance date established by § 63.1501, the owner or operator must comply with the emission limits calculated using the equations for PM and HCl in paragraphs (k)(1) and (2) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major source. The owner or operator must comply with the emission limit calculated using the equation for D/F in paragraph (k)(3) of this section for each secondary aluminum processing unit at a secondary aluminum production facility that is a major or area source.

- (1) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of PM in excess of:

$$L_{cPM} = \frac{\sum_{i=1}^n (L_{tiPM} \times T_{ti})}{\sum_{i=1}^n T_{ti}} \quad (\text{Eq.1})$$

Where,

$L_{tiPM}$  = The PM emission limit for individual emission unit i in paragraph (i)(1) and (2) of this section for a group 1 furnace or in paragraph (j)(2) of this section for an in-line fluxer;

$T_{ti}$  = The feed/charge rate for individual emission unit I; and

$L_{cPM}$  = The PM emission limit for the secondary aluminum processing unit.

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the PM limit.

- (2) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of HCl in excess of:

$$L_{cHCl} = \frac{\sum_{i=1}^n (L_{tiHCl} \times T_{ti})}{\sum_{i=1}^n T_{ti}} \quad (\text{Eq.2})$$

Where,

$L_{tiHCl}$  = The HCl emission limit for individual emission unit i in paragraph (i)(4) of this section for a group 1 furnace or in paragraph (j)(1) of this section for an in-line fluxer; and

$L_{cHCl}$  = The HCl emission limit for the secondary aluminum processing unit.

Note: In-line fluxers using no reactive flux materials cannot be included in this calculation since they are not subject to the HCl limit.

- (3) The owner or operator must not discharge or allow to be discharged to the atmosphere any 3-day, 24-hour rolling average emissions of D/F in excess of:

$$L_{cD/F} = \frac{\sum_{i=1}^n (L_{tiD/F} \times T_{ti})}{\sum_{i=1}^n T_{ti}} \quad (\text{Eq.3})$$

Where,

$L_{tiD/F}$  = The D/F emission limit for individual emission unit i in paragraph (i)(3) of this section for a group 1 furnace; and

$L_{cD/F}$  = The D/F emission limit for the secondary aluminum processing unit.

Note: Clean charge furnaces cannot be included in this calculation since they are not subject to the D/F limit.

- (4) The owner or operator of a SAPU at a secondary aluminum production facility that is a major source may demonstrate compliance with the emission limits of paragraphs (k)(1) through (3) of this section by demonstrating that each emission unit within the SAPU is in compliance with the applicable emission limits of paragraphs (i) and (j) of this section.
- (6) With the prior approval of the responsible permitting authority, an owner or operator may redesignate any existing group 1 furnace or in-line fluxer at a secondary aluminum production facility as a new emission unit. Any emission unit so redesignated may thereafter be included in a new SAPU at that facility. Any such redesignation will be solely for the purpose of this MACT standard and will be irreversible.

### **Sec. 63.1506 Operating requirements.**

#### **(a) Summary.**

- (1) On and after the compliance date established by § 63.1501, the owner or operator must operate all new and existing affected sources and control equipment according to the requirements of this section.
- (4) Operating requirements are summarized in Table 2 to this subpart.

(b) Labeling. The owner or operator must provide and maintain easily visible labels posted at each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln that identifies the applicable emission limits and means of compliance, including:

- (1) The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer).
- (2) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

(d) Feed/charge weight. The owner or operator of each affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) of feed/charge must:

- (1) Except as provided in paragraph (d)(3) of this section, install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test; and
- (2) Operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.
- (3) The owner or operator may chose to measure and record aluminum production weight from an affected source or emission unit rather than feed/charge weight to an affected source or emission unit, provided that:
  - (i) The aluminum production weight, rather than feed/charge weight is measured and recorded for all emission units within a SAPU; and
  - (ii) All calculations to demonstrate compliance with the emission limits for SAPUs are based on aluminum production weight rather than feed/charge weight.

(n) Group 1 furnace without add-on air pollution control devices.

The owner or operator of a group 1 furnace (including a group 1 furnace that is part of a secondary aluminum processing unit) without add-on air pollution control devices must:

- (1) Maintain the total reactive chlorine flux injection rate for each operating cycle or time period used in the performance test at or below the average rate established during the performance test.
- (2) Operate each furnace in accordance with the work practice/pollution prevention measures documented in the OM&M plan and within the parameter values or ranges established in the OM&M plan.
- (3) Operate each group 1 melting/holding furnace subject to the emission standards in § 63.1505(i)(2) using only clean charge as the feedstock.

(p) Corrective action. When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established during the performance test and incorporated in the OM&M plan, the owner or operator must initiate corrective action. Corrective action must restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Corrective actions taken must include follow-up actions necessary to return the process or control device parameter level(s) to the value or range of values established during the performance test and steps to prevent the likely recurrence of the cause of a deviation.

#### **Sec. 63.1510 Monitoring requirements.**

(a) Summary. On and after the compliance date established by § 63.1501, the owner or operator of a new or existing affected source or emission unit must monitor all control equipment and processes according to the requirements in this section. Monitoring requirements for each type of affected source and emission unit are summarized in Table 3 to this subpart.

(b) Operation, maintenance, and monitoring (OM&M) plan. The owner or operator must prepare and implement for each new or existing affected source and emission unit, a written operation, maintenance, and monitoring (OM&M) plan. The owner or operator of an existing affected source must submit the OM&M plan to the responsible permitting authority no later

than the compliance date established by § 63.1501(a). The owner or operator of any new affected source must submit the OM&M plan to the responsible permitting authority within 90 days after a successful initial performance test under § 63.1511(b), or within 90 days after the compliance date established by § 63.1501(b) if no initial performance test is required. The plan must be accompanied by a written certification by the owner or operator that the OM&M plan satisfies all requirements of this section and is otherwise consistent with the requirements of this subpart. The owner or operator must comply with all of the provisions of the OM&M plan as submitted to the permitting authority, unless and until the plan is revised in accordance with the following procedures. If the permitting authority determines at any time after receipt of the OM&M plan that any revisions of the plan are necessary to satisfy the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan. If the owner or operator determines that any other revisions of the OM&M plan are necessary, such revisions will not become effective until the owner or operator submits a description of the changes and a revised plan incorporating them to the permitting authority. Each plan must contain the following information:

- (1) Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.
- (2) A monitoring schedule for each affected source and emission unit.
- (3) Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits or standards in § 63.1505.
- (4) Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including:
  - (i) Calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
  - (ii) Procedures for the quality control and quality assurance of continuous emission or opacity monitoring systems as required by the general provisions in subpart A of this part.
- (5) Procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners, and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used.
- (6) Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (b)(1) of this section, including:
  - (i) Procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
  - (ii) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- (7) A maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (o) of this section for each group 1 furnace not equipped with an add-on air pollution control device.

(c) Labeling. The owner or operator must inspect the labels for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln at least once per calendar month to confirm that posted labels as required by the operational standard in § 63.1506(b) are intact and legible.

(e) Feed/charge weight. The owner or operator of an affected source or emission unit subject to an emission limit in kg/Mg (lb/ton) or  $\mu\text{g/Mg}$  (gr/ton) of feed/charge must install, calibrate, operate, and maintain a device to measure and record the total weight of feed/charge to, or the aluminum production from, the affected source or emission unit over the same operating cycle or time period used in the performance test. Feed/charge or aluminum production within SAPUs must be measured and recorded on an emission unit-by-emission unit basis. As an alternative to a measurement device, the owner or operator may use a procedure acceptable to the applicable permitting authority to determine the total weight of feed/charge or aluminum production to the affected source or emission unit.

- (1) The accuracy of the weight measurement device or procedure must be  $\pm 1$  percent of the weight being measured. The owner or operator may apply to the permitting agency for approval to use a device of alternative accuracy if the required accuracy cannot be achieved as a result of equipment layout or charging practices. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standard.
- (2) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

(j) Total reactive flux injection rate. These requirements apply to the owner or operator of a group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer. The owner or operator must:

- (1) Install, calibrate, operate, and maintain a device to continuously measure and record the weight of gaseous or liquid reactive flux injected to each affected source or emission unit.
  - (i) The monitoring system must record the weight for each 15-minute block period, during which reactive fluxing occurs, over the same operating cycle or time period used in the performance test.
  - (ii) The accuracy of the weight measurement device must be  $\pm 1$  percent of the weight of the reactive component of the flux being measured. The owner or operator may apply to the permitting authority for permission to use a weight measurement device of alternative accuracy in cases where the reactive flux flow rates are so low as to make the use of a weight measurement device of  $\pm 1$  percent impracticable. A device of alternative accuracy will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards.
  - (iii) The owner or operator must verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.
- (2) Calculate and record the gaseous or liquid reactive flux injection rate (kg/Mg or lb/ton) for each operating cycle or time period used in the performance test using the procedure in § 63.1512(o).

- (3) Record, for each 15-minute block period during each operating cycle or time period used in the performance test during which reactive fluxing occurs, the time, weight, and type of flux for each addition of:
    - (i) Gaseous or liquid reactive flux other than chlorine; and
    - (ii) Solid reactive flux.
  - (4) Calculate and record the total reactive flux injection rate for each operating cycle or time period used in the performance test using the procedure in § 63.1512(o).
  - (5) The owner or operator of a group 1 furnace or in-line fluxer performing reactive fluxing may apply to the Administrator for approval of an alternative method for monitoring and recording the total reactive flux addition rate based on monitoring the weight or quantity of reactive flux per ton of feed/charge for each operating cycle or time period used in the performance test. An alternative monitoring method will not be approved unless the owner or operator provides assurance through data and information that the affected source will meet the relevant emission standards on a continuous basis.
- (o) Group 1 furnace without add-on air pollution control devices. These requirements apply to the owner or operator of a group 1 furnace that is not equipped with an add-on air pollution control device.
- (1) The owner or operator must develop, in consultation with the responsible permitting authority, a written site-specific monitoring plan. The site-specific monitoring plan must be submitted to the permitting authority as part of the OM&M plan. The site-specific monitoring plan must contain sufficient procedures to ensure continuing compliance with all applicable emission limits and must demonstrate, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. This may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate. If the permitting authority determines that any revisions of the site-specific monitoring plan are necessary to meet the requirements of this section or this subpart, the owner or operator must promptly make all necessary revisions and resubmit the revised plan to the permitting authority.
    - (i) The owner or operator of an existing affected source must submit the site-specific monitoring plan to the applicable permitting authority for review at least 6 months prior to the compliance date.
    - (ii) The permitting authority will review and approve or disapprove a proposed plan, or request changes to a plan, based on whether the plan contains sufficient provisions to ensure continuing compliance with applicable emission limits and demonstrates, based on documented test results, the relationship between emissions of PM, HCl, and D/F and the proposed monitoring parameters for each pollutant. Test data must establish the highest level of PM, HCl, and D/F that will be emitted from the furnace. Subject to permitting agency approval of the OM&M plan, this may be determined by conducting performance tests and monitoring operating parameters while charging the furnace with feed/charge materials containing the highest anticipated levels of oils and coatings and fluxing at the highest anticipated rate.

- (2) Each site-specific monitoring plan must document each work practice, equipment/design practice, pollution prevention practice, or other measure used to meet the applicable emission standards.
  - (3) Each site-specific monitoring plan must include provisions for unit labeling as required in paragraph (c) of this section, feed/charge weight measurement (or production weight measurement) as required in paragraph (e) of this section and flux weight measurement as required in paragraph (j) of this section.
  - (4) Each site-specific monitoring plan for a melting/holding furnace subject to the clean charge emission standard in § 63.1505(i)(3) must include these requirements:
    - (i) The owner or operator must record the type of feed/ charge (e.g., ingot, thermally dried chips, dried scrap, etc.) for each operating cycle or time period used in the performance test; and
    - (ii) The owner or operator must submit a certification of compliance with the applicable operational standard for clean charge materials in § 63.1506(n)(3) for each 6-month reporting period. Each certification must contain the information in § 63.1516(b)(2)(iv).
  - (7) If a site-specific monitoring plan includes a scrap inspection program for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (p) of this section.
  - (8) If a site-specific monitoring plan includes a calculation method for monitoring the scrap contaminant level of furnace feed/charge materials, the plan must include provisions for the demonstration and implementation of the program in accordance with all applicable requirements in paragraph (q) of this section.
- (p) Scrap inspection program for group 1 furnace without add-on air pollution control devices. A scrap inspection program must include:
- (1) A proven method for collecting representative samples and measuring the oil and coatings content of scrap samples;
  - (2) A scrap inspector training program;
  - (3) An established correlation between visual inspection and physical measurement of oil and coatings content of scrap samples;
  - (4) Periodic physical measurements of oil and coatings content of randomly-selected scrap samples and comparison with visual inspection results;
  - (5) A system for assuring that only acceptable scrap is charged to an affected group 1 furnace; and
  - (6) Recordkeeping requirements to document conformance with plan requirements.
- (q) Monitoring of scrap contamination level by calculation method for group 1 furnace without add-on air pollution control devices. The owner or operator of a group 1 furnace dedicated to processing a distinct type of furnace feed/charge composed of scrap with a uniform composition (such as rejected product from a manufacturing process for which the coating-to-scrap ratio can be documented) may include a program in the site-specific monitoring plan for determining, monitoring, and certifying the scrap contaminant level using a calculation method rather than a scrap inspection program. A scrap contaminant monitoring program using a calculation method must include:

- (1) Procedures for the characterization and documentation of the contaminant level of the scrap prior to the performance test.
  - (2) Limitations on the furnace feed/charge to scrap of the same composition as that used in the performance test. If the performance test was conducted with a mixture of scrap and clean charge, limitations on the proportion of scrap in the furnace feed/charge to no greater than the proportion used during the performance test.
  - (3) Operating, monitoring, recordkeeping, and reporting requirements to ensure that no scrap with a contaminant level higher than that used in the performance test is charged to the furnace.
- (s) Site-specific requirements for secondary aluminum processing units.
- (1) An owner or operator of a secondary aluminum processing unit at a facility must include, within the OM&M plan prepared in accordance with § 63.1510(b), the following information:
    - (i) The identification of each emission unit in the secondary aluminum processing unit;
    - (ii) The specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit and the date of its installation or application;
    - (iii) The emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit;
    - (iv) Information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operational standards of this subpart; and
    - (v) The monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and the monitoring procedures for daily calculation of the 3-day, 24-hour rolling average using the procedure in § 63.1510(t).
  - (2) The SAPU compliance procedures within the OM&M plan may not contain any of the following provisions:
    - (i) Any averaging among emissions of differing pollutants;
    - (ii) The inclusion of any affected sources other than emission units in a secondary aluminum processing unit;
    - (iii) The inclusion of any emission unit while it is shutdown; or
    - (iv) The inclusion of any periods of startup, shutdown, or malfunction in emission calculations.
  - (3) To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator must submit a request to the applicable permitting authority containing the information required by paragraph (s)(1) of this section and obtain approval of the applicable permitting authority prior to implementing any revisions.
- (t) Secondary aluminum processing unit. Except as provided in paragraph (u) of this section, the owner or operator must calculate and record the 3-day, 24-hour rolling average emissions of PM, HCl, and D/F for each secondary aluminum processing unit on a daily basis. To calculate the 3-day, 24-hour rolling average, the owner or operator must:

- (1) Calculate and record the total weight of material charged to each emission unit in the secondary aluminum processing unit for each 24-hour day of operation using the feed/charge weight information required in paragraph (e) of this section. If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit, rather than weight of material charged to the emission unit, all performance test emissions results and all calculations must be conducted on the aluminum production weight basis.
- (2) Multiply the total feed/charge weight to the emission unit, or the weight of aluminum produced by the emission unit, for each emission unit for the 24-hour period by the emission rate (in lb/ton of feed/charge) for that emission unit (as determined during the performance test) to provide emissions for each emission unit for the 24-hour period, in pounds.
- (3) Divide the total emissions for each SAPU for the 24-hour period by the total material charged to the SAPU, or the weight of aluminum produced by the SAPU over the 24-hour period to provide the daily emission rate for the SAPU.
- (4) Compute the 24-hour daily emission rate using Equation 4:

$$E_{day} = \frac{\sum_{i=1}^n (T_i \times ER_i)}{\sum_{i=1}^n T_i} \quad (\text{Eq.4})$$

Where,

$E_{day}$  = The daily PM, HCl, or D/F emission rate for the secondary aluminum processing unit for the 24-hour period;

$T_i$  = The total amount of feed, or aluminum produced, for emission unit i for the 24-hour period (tons);

$ER_i$  = The measured emission rate for emission unit i as determined in the performance test (lb/ton or  $\mu\text{Mg}$  of feed/charge); and

$n$  = The number of emission units in the secondary aluminum processing unit.

- (5) Calculate and record the 3-day, 24-hour rolling average for each pollutant each day by summing the daily emission rates for each pollutant over the 3 most recent consecutive days and dividing by 3.

(u) Secondary aluminum processing unit compliance by individual emission unit demonstration. As an alternative to the procedures of paragraph (t) of this section, an owner or operator may demonstrate, through performance tests, that each individual emission unit within the secondary aluminum production unit is in compliance with the applicable emission limits for the emission unit.

#### **Sec. 63.1511 Performance test/compliance demonstration general requirements.**

(e) Repeat tests. The owner or operator of new or existing affected sources and emission units located at secondary aluminum production facilities that are major sources must conduct a performance test every 5 years following the initial performance test.

**Sec. 63.1513 Equations for determining compliance.**

(b) PM, HCl and D/F emission limits. Use Equation 7 to determine compliance with an emission limit for PM, HCl, and D/F:

$$E = \frac{C \times Q \times K}{P} \quad (\text{Eq.7})$$

Where,

E = Emission rate of PM, HCl, or D/F, kg/Mg (lb/ton) of feed;

C = Concentration of PM, HCl, or D/F, g/dscm (gr/dscf);

Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr);

K<sub>1</sub> = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr); and

P = Production rate, Mg/hr (ton/hr).

(c) HCl percent reduction standard. Use Equation 8 to determine compliance with an HCl percent reduction standard:

$$\%R = \frac{L_i - L_o}{L_i} \times 100 \quad (\text{Eq.8})$$

Where,

%R = Percent reduction of the control device;

L<sub>i</sub> = Inlet loading of pollutant, kg/Mg (lb/ton); and

L<sub>o</sub> = Outlet loading of pollutant, kg/Mg (lb/ton).

(d) Conversion of D/F measurements to TEQ units. To convert D/F measurements to TEQ units, the owner or operator must use the procedures and equations in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), incorporated by reference in § 63.1502 of this subpart, available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB 90-145756.

(e) Secondary aluminum processing unit. Use the procedures in paragraphs (e)(1), (2), and (3) or the procedure in paragraph (e)(4) of this section to determine compliance with emission limits for a secondary aluminum processing unit.

- (1) Use Equation 9 to compute the mass-weighted PM emissions for a secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit (E<sub>cPM</sub>) is less than or equal to the emission limit for the secondary aluminum processing unit (L<sub>cPM</sub>) calculated using Equation 1 in § 63.1505(k).

$$E_{cPM} = \frac{\sum_{i=1}^n (E_{tiPM} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq.9})$$

Where,

E<sub>cPM</sub> = The mass-weighted PM emissions for the secondary aluminum processing unit;

$E_{tiPM}$  = Measured PM emissions for individual emission unit i;

$T_{ti}$  = The average feed rate for individual emission unit i during the operating cycle or performance test period; and

n = The number of emission units in the secondary aluminum processing unit.

- (2) Use Equation 10 to compute the aluminum mass-weighted HCl emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit ( $E_{cHCl}$ ) is less than or equal to the emission limit for the secondary aluminum processing unit ( $L_{cHCl}$ ) calculated using Equation 2 in § 63.1505(k).

$$E_{cHCl} = \frac{\sum_{i=1}^n (E_{tiHCl} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq.10})$$

Where,

$E_{cHCl}$  = The mass-weighted HCl emissions for the secondary aluminum processing unit; and

$E_{tiHCl}$  = Measured HCl emissions for individual emission unit i.

- (3) Use Equation 11 to compute the aluminum mass-weighted D/F emissions for the secondary aluminum processing unit. Compliance is achieved if the mass-weighted emissions for the secondary aluminum processing unit is less than or equal to the emission limit for the secondary aluminum processing unit ( $L_{cD/F}$ ) calculated using Equation 3 in § 63.1505(k).

$$E_{cD/F} = \frac{\sum_{i=1}^n (E_{tiD/F} \times T_{ti})}{\sum_{i=1}^n (T_{ti})} \quad (\text{Eq.11})$$

Where,

$E_{cD/F}$  = The mass-weighted D/F emissions for the secondary aluminum processing unit; and

$E_{tiD/F}$  = Measured D/F emissions for individual emission unit i.

- (4) As an alternative to using the equations in paragraphs (e)(1), (2), and (3) of this section, the owner or operator may demonstrate compliance for a secondary aluminum processing unit by demonstrating that each existing group 1 furnace is in compliance with the emission limits for a new group 1 furnace in § 63.1505(i) and that each existing in-line fluxer is in compliance with the emission limits for a new in-line fluxer in § 63.1505(j).

**Sec. 63.1515 Notifications.**

(a) Initial notifications. The owner or operator must submit initial notifications to the applicable permitting authority as described in paragraphs (a)(1) through (7) of this section.

- (1) As required by § 63.9(b)(1), the owner or operator must provide notification for an area source that subsequently increases its emissions such that the source is a major source subject to the standard.
- (2) As required by § 63.9(b)(3), the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is not required under § 63.5(d), must provide notification that the source is subject to the standard.
- (3) As required by § 63.9(b)(4), the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of this subpart and for which an application for approval of construction or reconstruction is required by § 63.5(d) must provide the following notifications:
  - (i) Intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;
  - (ii) Date when construction or reconstruction was commenced (submitted simultaneously with the application for approval of construction or reconstruction if construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced if construction or reconstruction commenced after the effective date of this subpart);
  - (iii) Anticipated date of startup; and
  - (iv) Actual date of startup.
- (4) As required by § 63.9(b)(5), after the effective date of this subpart, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, must provide notification of the intended construction or reconstruction. The notification must include all the information required for an application for approval of construction or reconstruction as required by § 63.5(d). For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.
  - (i) The application must be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or
  - (ii) The application must be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.
- (5) As required by § 63.9(d), the owner or operator must provide notification of any special compliance obligations for a new source.
- (6) As required by § 63.9(e) and (f), the owner or operator must provide notification of the anticipated date for conducting performance tests and visible emission observations. The owner or operator must notify the Administrator of the intent to conduct a performance test at least 60 days before the performance test is scheduled; notification of opacity or visible

emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.

- (7) As required by § 63.9(g), the owner or operator must provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) Notification of compliance status report. Each owner or operator of an existing affected source must submit a notification of compliance status report within 60 days after the compliance date established by § 63.1501(a). Each owner or operator of a new affected source must submit a notification of compliance status report within 90 days after conducting the initial performance test required by § 63.1511(b), or within 90 days after the compliance date established by § 63.1501(b) if no initial performance test is required. The notification must be signed by the responsible official who must certify its accuracy. A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted. A complete notification of compliance status report must include:

- (1) All information required in § 63.9(h). The owner or operator must provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
- (2) The approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
- (3) Unit labeling as described in § 63.1506(b), including process type or furnace classification and operating requirements.
- (4) The compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (5) Design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in § 63.1506(c).
- (6) If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in § 63.1510(f).
- (9) The OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
- (10) Startup, shutdown, and malfunction plan, with revisions.

**Sec. 63.1516 Reports.**

(a) Startup, shutdown, and malfunction plan/reports. The owner or operator must develop and implement a written plan as described in § 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard. The owner or operator shall also keep records of each event as required by § 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in § 63.6(e)(3). In addition to the information required in § 63.6(e)(3), the plan must include:

- (1) Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
- (2) Corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(b) Excess emissions/summary report. As required by § 63.10(e)(3), the owner or operator must submit semiannual reports within 60 days after the end of each 6-month period. Each report must contain the information specified in § 63.10(c). When no deviations of parameters have occurred, the owner or operator must submit a report stating that no excess emissions occurred during the reporting period.

- (1) A report must be submitted if any of these conditions occur during a 6-month reporting period:
  - (i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.
  - (ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.
  - (iii) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.
  - (iv) An excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
  - (v) An action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in § 63.6(e)(3).
  - (vi) An affected source (including an emission unit in a secondary aluminum processing unit) was not operated according to the requirements of this subpart.
  - (vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.
- (2) Each report must include each of these certifications, as applicable:
  - (iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: "Each group 1 furnace without add-on air pollution control devices subject to emission limits in § 63.1505(i)(2) processed only clean charge during this reporting period."
- (3) The owner or operator must submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and

procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

(c) Annual compliance certifications. For the purpose of annual certifications of compliance required by 40 CFR part 70 or 71, the owner or operator must certify continuing compliance based upon, but not limited to, the following conditions:

- (1) Any period of excess emissions, as defined in paragraph (b)(1) of this section, that occurred during the year were reported as required by this subpart; and
- (2) All monitoring, recordkeeping, and reporting requirements were met during the year.

#### **Sec. 63.1517 Records**

(a) As required by § 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart.

- (1) The owner or operator must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.
- (2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
- (3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

(b) In addition to the general records required by § 63.10(b), the owner or operator of a new or existing affected source (including an emission unit in a secondary aluminum processing unit) must maintain records of:

- (5) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.
- (7) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.
- (8) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.
- (9) Records of all charge materials for each thermal chip dryer, dross-only furnace, and group 1 melting/holding furnaces without air pollution control devices processing only clean charge.
- (13) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (15) Records for any approved alternative monitoring or test procedure.
- (16) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
  - (i) Startup, shutdown, and malfunction plan;
  - (ii) OM&M plan; and

- (iii) Site-specific secondary aluminum processing unit emission plan (if
- (iv) applicable).
- (17) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.

**Sec. 63.1518 Applicability of general provisions.**

The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart.

**VI. Table 2 to Subpart RRR.--Summary of Operating Requirements for New and Existing Affected Sources and Emission Units**

Affected source/emission unit	Monitor type/operation/ process	Operating requirements
All affected sources and emission units with an add-on air pollution control device.	Emission capture and collection system.	Design and install in accordance with Industrial Ventilation: A Handbook of Recommended Practice; operate in accordance with OM&M plan. <sup>b</sup>
All affected sources and emission units subject to production-based (lb/ton of feed) emission limits <sup>a</sup> .	Charge/feed weight or Production weight.	Operate a device that records the weight of each charge; Operate in accordance with OM&M plan. <sup>b</sup>
Group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln.	Labeling.....	Identification, operating parameter ranges and operating requirements posted at affected sources and emission units; control device temperature and residence time requirements posted at scrap dryer/delacquering kiln/decoating kiln.
Aluminum scrap shredder with fabric filter.	Bag leak detector or.....	Initiate corrective action within 1-hr of alarm and complete in accordance with OM&M plan <sup>b</sup> ; operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM or.....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with OM&M plan. <sup>b</sup>
	VE.....	Initiate corrective action within 1-hr of any observed VE and complete in accordance with the OM&M plan. <sup>b</sup>
Thermal chip dryer with afterburner.....	Afterburner operating temperature.	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation..... Feed material.....	Operate in accordance with OM&M plan. <sup>b</sup> Operate using only unpainted aluminum chips.
Scrap dryer/delacquering kiln/decoating kiln with afterburner and lime-injected fabric filter.	Afterburner operating temperature.	Maintain average temperature for each 3-hr period at or above average operating temperature during the performance test.
	Afterburner operation..... Bag leak detector or.....	Operate in accordance with OM&M plan. <sup>b</sup> Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM.....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>

	Fabric filter inlet temperature.	Maintain average fabric filter inlet temperature for each 3-hr period at or below average temperature during the performance test +14 °C (+25 °F).
	Lime injection rate.....	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established during the performance test for continuous injection systems.
Sweat furnace with afterburner.....	Afterburner operating temperature	If a performance test was conducted, maintain average temperature for each 3-hr period at or above average operating temperature during the performance test; if a performance test was not conducted, and afterburner meets specifications of Sec. 63.1505(f)(1), maintain average temperature for each 3-hr period at or above 1600 °F.
	Afterburner operation.....	Operate in accordance with OM&M plan. <sup>b</sup>
Dross-only furnace with fabric filter...	Bag leak detector or.....	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM.....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>
	Feed/charge material.....	Operate using only dross as the feed material.
Rotary dross cooler with fabric filter..	Bag leak detector or.....	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM.....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>
In-line fluxer with lime-injected fabric filter (including those that are part of a secondary aluminum processing unit).	Bag leak detector or.....	Initiate corrective action within 1-hr of alarm and complete in accordance with the OM&M plan; <sup>b</sup> operate such that alarm does not sound more than 5% of operating time in 6-month period.
	COM.....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more and complete in accordance with the OM&M plan. <sup>b</sup>
	Lime injection rate.....	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain

In-line fluxer (using no reactive flux material).	Reactive flux injection rate.	feeder setting at level established during performance test for continuous injection systems. Maintain reactive flux injection rate at or below rate used during the performance test for each operating cycle or time period used in the performance test.
	Flux materials.....	Use no reactive flux.
	Bag leak detector or.....	Initiate corrective action within 1-hr of alarm; operate such that alarm does not sound more than 5% of operating time in 6-month period; complete corrective action in accordance with the OM&M plan. <sup>b</sup>
	COM.....	Initiate corrective action within 1-hr of a 6-minute average opacity reading of 5% or more; complete corrective action in accordance with the OM&M plan. <sup>b</sup>
	Fabric filter inlet temperature.	Maintain average fabric filter inlet temperature for each 3-hour period at or below average temperature during the performance test +14 & °C (+25 °F).
	Reactive flux injection rate.	Maintain reactive flux injection rate (lb/hr) at or below rate used during the performance test for each furnace cycle.
Group 1 furnace with lime-injected fabric filter (including those that are part of a secondary aluminum processing unit).	Lime injection rate.....	Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; maintain feeder setting at level established at performance test for continuous injection systems.
	Maintain molten aluminum level.	Operate side-well furnaces such that the level of molten metal is above the top of the passage between sidewell and hearth during reactive flux injection, unless the hearth is also controlled.
	Fluxing in sidewell furnace hearth.	Add reactive flux only to the sidewell of the furnace unless the hearth is also controlled.
	Reactive flux injection rate.	Maintain reactive flux injection rate (lb/hr) at or below rate used during the performance test for each operating cycle or time period used in the performance test.
	Site-specific monitoring plan <sup>c</sup>	Operate furnace within the range of charge materials, contaminant levels, and parameter values established in the site-specific monitoring plan.
Group 1 furnace without add-on controls (including those that are part of a secondary aluminum processing unit).	Feed material (melting/holding furnace).	Use only clean charge.

Clean (group 2) furnace.....

Charge and flux materials.

Use only clean charge. Use no reactive flux.

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<sup>a</sup> Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces including melting/holding furnaces.

<sup>b</sup> OM&M plan--Operation, maintenance, and monitoring plan.

<sup>c</sup> Site-specific monitoring plan. Owner/operators of group 1 furnaces without control devices must include a section in their OM&M plan that documents work practice and pollution prevention measures, including procedures for scrap inspection, by which compliance is achieved with emission limits and process or feed parameter-based operating requirements. This plan and the testing to demonstrate adequacy of the monitoring plan must be developed in coordination with and approved by the permitting authority.

## VII. Table 3 to Subpart RRR.--Summary of Monitoring Requirements for New and Existing Affected Sources and Emission Units

Affected source/Emission unit	Monitor type/Operation/ Process	Monitoring requirements
All affected sources and emission units with an add-on air pollution control device.	Emission capture and collection system.	Annual inspection of all emission capture, collection, and transport systems to ensure that systems continue to operate in accordance with ACGIH standards.
All affected sources and emission units subject to production-based (lb/ton of feed/charge) emission limits <sup>a</sup> .	Feed/charge weight.....	Record weight of each feed/charge, weight measurement device or other procedure accuracy of $\pm >1\%$ <sup>b</sup> ; calibrate according to manufacturers specifications, or at least once every 6 months.
Group 1 furnace, group 2 furnace, in-line fluxer, and scrap dryer/ delacquering kiln/decoating kiln.	Labeling.....	Check monthly to confirm that labels are intact and legible.
Aluminum scrap shredder with fabric filter.	Bag leak detector or.....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" <sup>c</sup> ; record voltage output from bag leak detector.
	COM or.....	Design and install in accordance with PS-1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	VE.....	Conduct and record results of 30-minute daily test in accordance with Method 9.
Thermal chip dryer with afterburner....	Afterburner operating temperature.	Continuous measurement device to meet specifications in Sec. 63.1510(g)(1); record average temperature for each 15-minute block; determine and record 3-hr block averages.
	Afterburner operation.....	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Feed/charge material.....	Record identity of each feed/charge; certify feed/charge materials every 6 months.
Scrap dryer/ delacquering kiln/ decoating kiln with afterburner and lime injected fabric filter.	Afterburner operating temperature.	Continuous measurement device to meet specifications in Sec. 63.1510(g)(1); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
	Afterburner operation.....	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
	Bag leak detector or.....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" <sup>c</sup> ; record voltage output from

	COM.....	bag leak detector. Design and install in accordance with PS-1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Lime injection rate.....	For continuous injection systems, inspect each feed hopper or silo every 8 hrs to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hrs for 3 days; return to 8-hr inspections if corrective action results in no further blockage during 3-day period; record feeder setting daily.
	Fabric filter inlet temperature.	Continuous measurement device to meet specifications in Sec. 63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
Sweat furnace with afterburner.....	Afterburner operating temperature.	Continuous measurement device to meet specifications in Sec. 63.1510(g)(1); record temperatures in 15-minute block averages; determine and record 3-hr block averages.
	Afterburner operation.....	Annual inspection of afterburner internal parts; complete repairs in accordance with the OM&M plan.
Dross-only furnace with fabric filter...	Bag leak detector or.....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" <sup>c</sup> ; record output voltage from bag leak detector.
	COM.....	Design and install in accordance with PS-1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
	Feed/charge material.....	Record identity of each feed/charge; certify charge materials every 6 months.
Rotary dross cooler with fabric filter..	Bag leak detector or.....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" <sup>c</sup> ; record output voltage from bag leak detector.
	COM.....	Design and install in accordance with PS-1; collect data in accordance with subpart A of 40 CFR part 63; determine and record 6-minute block averages.
In-line fluxer with lime-injected fabric	Bag leak detector or..... filter.	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" <sup>c</sup> ; record output voltage from bag leak detector.
	COM.....	Design and install in accordance with PS-1; collect data in accordance with

	Reactive flux injection rate.	subpart A of 40 CFR part 63; determine and record 6-minute block averages Weight measurement device accuracy of $\pm 1\%$ <sup>b</sup> ; calibrate according to manufacturer's specifications or at least once every 6 months; record time, weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per Sec. 63.1510(j)(5).
	Lime injection rate.....	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hrs to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hrs for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period. <sup>d</sup>
In-line fluxer using no reactive flux...	Flux materials.....	Record flux materials; certify every 6 months for no reactive flux.
Group 1 furnace with lime-injected fabric filter.	Bag leak detector or.....	Install and operate in accordance with "Fabric Filter Bag Leak Detection Guidance" <sup>c</sup> ; record output voltage from bag leak detector.
	COM.....	Design and install in accordance with PS-1; collect data in accordance with subpart A of 40 part CFR 63; determine and record 6-minute block averages.
	Lime injection rate.....	For continuous injection systems, record feeder setting daily and inspect each feed hopper or silo every 8 hours to verify that lime is free-flowing; record results of each inspection. If blockage occurs, inspect every 4 hours for 3 days; return to 8-hour inspections if corrective action results in no further blockage during 3-day period. <sup>d</sup>
	Reactive flux injection rate	Weight measurement device accuracy of $+1\%$ <sup>b</sup> ; calibrate every 3 months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test; or Alternative flux injection rate determination procedure per Sec. 63.1510(j)(5).

Group 1 furnace without add-on controls.	Fabric filter inlet temperature.	Continuous measurement device to meet specifications in Sec. 63.1510(h)(2); record temperatures in 15-minute block averages; determine and record 3-hour block averages.
	Maintain molten aluminum level in sidewell furnace.	Maintain aluminum level operating log; certify every 6 months.
	Fluxing in sidewell furnace hearth.	Maintain flux addition operating log; certify every 6 months.
	Reactive flux injection rate.	Weight measurement device accuracy of +1% <sup>b</sup> ; calibrate according to manufacturers specifications or at least once every six months; record weight and type of reactive flux added or injected for each 15-minute block period while reactive fluxing occurs; calculate and record total reactive flux injection rate for each operating cycle or time period used in performance test.
	OM&M plan (approved by permitting agency).	Demonstration of site-specific monitoring procedures to provide data and show correlation of emissions across the range of charge and flux materials and furnace operating parameters.
Clean (group 2) furnace.....	Feed material (melting/holding furnace).	Record type of permissible feed/charge material; certify charge materials every 6 months.
	Charge and flux materials..	Record charge and flux materials; certify every 6 months for clean charge and no reactive flux.

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<sup>a</sup>Thermal chip dryers, scrap dryers/delacquering kilns/decoating kilns, dross-only furnaces, in-line fluxers and group 1 furnaces or melting/holding furnaces.

<sup>b</sup>Permitting agency may approve measurement devices of alternative accuracy, for example in cases where flux rates are very low and costs of meters of specified accuracy are prohibitive; or where feed/charge weighing devices of specified accuracy are not practicable due to equipment layout or charging practices.

<sup>c</sup>Non-triboelectric bag leak detectors must be installed and operated in accordance with manufacturers' specifications.

<sup>d</sup>Permitting agency may approve other alternatives including load cells for lime hopper weight, sensors for carrier gas pressure, or HCl monitoring devices at fabric filter outlet.

## VIII. Appendix A to Subpart RRR.--General Provisions Applicability to Subpart RRR

Citation	Requirement	Applies to RRR	Comment
Sec. 63.1(a)(1)-(4).....	General Applicability.	Yes.	.....
Sec. 63.1(a)(5).....	.....	No.....	[Reserved].
Sec. 63.1(a)(6)-(8).....	.....	Yes.	.....
Sec. 63.1(a)(9).....	.....	No.....	[Reserved].
Sec. 63.1(a)(10)-(14).....	.....	Yes.	.....
Sec. 63.1(b).....	Initial Applicability Determination.	Yes.....	EPA retains approval authority.
Sec. 63.1(c)(1).....	Applicability After Standard Established.	Yes.	.....
Sec. 63.1(c)(2).....	.....	Yes.....	States have option to exclude area sources from title V permit program.
Sec. 63.1(c)(3).....	.....	No.....	[Reserved].
Sec. 63.1(c)(4)-(5).....	.....	Yes.	.....
Sec. 63.1(d).....	.....	No.....	[Reserved].
Sec. 63.1(e).....	Applicability of Permit Program.	Yes.	.....
Sec. 63.2.....	Definitions.....	Yes.....	Additional definitions in Sec. 63.1503.
Sec. 63.3.....	Units and Abbreviations.	Yes.....	.....
Sec. 63.4(a)(1)-(3).....	Prohibited Activities.	Yes.	.....
Sec. 63.4(a)(4).....	.....	No.....	[Reserved]
Sec. 63.4(a)(5).....	.....	Yes.	.....
Sec. 63.4(b)-(c).....	Circumvention/ Severability.	Yes.	.....
Sec. 63.5(a).....	Construction and Reconstruction— Applicability	Yes.	.....
Sec. 63.5(b)(1).....	Existing, New, Reconstructed Sources--Requirements.	Yes.	.....
Sec. 63.5(b)(2).....	.....	No.....	[Reserved].
Sec. 63.5(b)(3)-(6).....	.....	Yes.	.....
Sec. 63.5(c).....	.....	No.....	[Reserved].
Sec. 63.5(d).....	Application for Approval of Construction/ Reconstruction.	Yes.	.....
Sec. 63.5(e).....	Approval of Construction/ Reconstruction.	Yes.	.....
Sec. 63.5(f).....	Approval of Construction/ Reconstruction Based on State Review.	Yes.	.....

Sec. 63.6(a).....	Compliance with Standards and Maintenance—Applicability.	Yes.	.....
Sec. 63.6(b)(1)-(5).....	New and Reconstructed Sources--Dates.	Yes.	.....
Sec. 63.6(b)(6).....	.....	No.....	[Reserved].
Sec. 63.6(b)(7).....	.....	Yes.	.....
Sec. 63.6(c)(1).....	Existing Sources Dates	Yes.....	Sec. 63.1501 specifies dates.
Sec. 63.6(c)(2).....	.....	Yes.	.....
Sec. 63.6(c)(3)-(4).....	.....	No.....	[Reserved].
Sec. 63.6(c)(5).....	.....	Yes.	.....
Sec. 63.6(d).....	.....	No.....	[Reserved].
Sec. 63.6(e)(1)-(2).....	Operation & Maintenance Requirements.	Yes.....	Sec. 63.1510 requires plan.
Sec. 63.6(e)(3).....	Startup, Shutdown, and Malfunction Plan.	Yes.	.....
Sec. 63.6(f).....	Compliance with Emission Standards.	Yes.	.....
Sec. 63.6(g).....	Alternative Standard..	No.....	.....
Sec. 63.6(h).....	Compliance with Opacity/VE Standards.	Yes.	.....
Sec. 63.6(i)(1)-(14).....	Extension of Compliance.	Yes.	.....
Sec. 63.6(i)(15).....	.....	No.....	[Reserved].
Sec. 63.6(i)(16).....	.....	Yes.	.....
Sec. 63.6(j).....	Exemption from Compliance.	Yes.	.....
Sec. 63.7(a)-(h).....	Performance Test Requirements--Applicability and Dates.	Yes.....	Except § 63.1511 establishes dates for initial performance tests.
Sec. 63.7(b).....	Notification.....	Yes.	.....
Sec. 63.7(c).....	Quality Assurance/Test Plan.	Yes.	.....
Sec. 63.7(d).....	Testing Facilities....	Yes.	.....
Sec. 63.7(e).....	Conduct of Tests.....	Yes.	.....
Sec. 63.7(f).....	Alternative Test Method.	Yes.	.....
Sec. 63.7(g).....	Data Analysis.....	Yes.	.....
Sec. 63.7(h).....	Waiver of Tests.....	Yes.	.....
Sec. 63.8(a)(1).....	Monitoring Requirements--Applicability	Yes.	.....
Sec. 63.8(a)(2).....	.....	Yes.	.....
Sec. 63.8(a)(3).....	.....	No.....	[Reserved]
Sec. 63.8(a)(4).....	.....	Yes.....	.....
Sec. 63.8(b).....	Conduct of Monitoring.	Yes.	.....
Sec. 63.8(c)(1)-(3).....	CMS Operation and Maintenance.	Yes.	.....
Sec. 63.8(c)(4)-(8).....	.....	Yes.	.....
Sec. 63.8(d).....	Quality Control.....	Yes.	.....
Sec. 63.8(e).....	CMS Performance Evaluation.	Yes.	.....

Sec. 63.8(f)(1)-(5).....	Alternative Monitoring Method.	No.....	Sec. 63.1510(w) includes provisions for monitoring alternatives.
Sec. 63.8(f)(6).....	Alternative to RATA Test.	Yes.	.....
Sec. 63.8(g)(1).....	Data Reduction.....	Yes.	.....
Sec. 63.8(g)(2).....	.....	No.....	Sec. 63.1512 requires five 6-minute averages for an aluminum scrap shredder.
Sec. 63.8(g)(3)-(5).....	.....	Yes.	.....
Sec. 63.9(a).....	Notification Requirements—Applicability.	Yes.	.....
Sec. 63.9(b).....	Initial Notifications.	Yes.	.....
Sec. 63.9(c).....	Request for Compliance Extension.	Yes.	.....
Sec. 63.9(d).....	New Source Notification for Special Compliance Requirements.	Yes.	.....
63.9(e).....	Notification of Performance Test.	Yes.	.....
Sec. 63.9(f).....	Notification of VE/Opacity Test.	Yes.	.....
Sec. 63.9(g).....	Additional CMS Notifications.	Yes.	.....
Sec. 63.9(h)(1)-(3).....	Notification of Compliance Status.	Yes.	Except Sec. 63.1515 establishes dates for notification of compliance status reports.
Sec. 63.9(h)(4).....	.....	No.....	[Reserved].
Sec. 63.9(h)(5)-(6).....	.....	Yes.	.....
Sec. 63.9(i).....	Adjustment of Deadlines.	Yes.	.....
Sec. 63.9(j).....	Change in Previous Information.	Yes.	.....
Sec. 63.10(a).....	Recordkeeping/Reporting—Applicability.	Yes.	.....
Sec. 63.10(b).....	General Requirements..	Yes.....	Sec. 63.1517 includes additional requirements.
Sec. 63.10(c)(1).....	Additional CMS Recordkeeping.	Yes.	.....
Sec. 63.10(c)(2)-(4).....	.....	No.....	[Reserved].
Sec. 63.10(c)(5).....	.....	Yes.	.....
Sec. 63.10(c)(6).....	.....	Yes.	.....
Sec. 63.10(c)(7)-(8).....	.....	Yes.	.....
Sec. 63.10(c)(9).....	.....	No.....	[Reserved].
Sec. 63.10(c) (10)-(13).....	.....	Yes.	.....
Sec. 63.10(c) (14).....	.....	Yes.	.....
Sec. 63.10(d)(1).....	General Reporting Requirements.	Yes.	.....

Sec. 63.10(d)(2).....	Performance Test Results.	Yes.	.....
Sec. 63.10(d)(3).....	Opacity or VE Observations.	Yes.	.....
Sec. 63.10(d)(4) -(5).....	Progress Reports/ Startup, Shutdown, and Malfunction Reports.	Yes.	.....
Sec. 63.10(e)(1)-(2).....	Additional CMS Reports	Yes.	.....
Sec. 63.10(e)(3).....	Excess Emissions/CMS Performance Reports.	Yes.	.....
Sec. 63.10(e)(4).....	COMS Data Reports.....	Yes.	.....
Sec. 63.10(f).....	Recordkeeping/ Reporting Waiver.	Yes.	.....
Sec. 63.11(a)-(b).....	Control Device Requirements.	No.....	Flares not applicable.
Sec. 63.12(a)-(c).....	State Authority and Delegations.	Yes.	EPA retains authority for applicability determinations.
Sec. 63.13.....	Addresses.....	Yes.	.....
Sec. 63.14.....	Incorporation by Reference.	Yes.	Chapters 3 and 5 of ACGIH Industrial Ventilation Manual for capture/collection systems; and Interim Procedures for Estimating Risk Associated with Exposure to Mixtures of Chlorinated Dibenzofurans (CDDs and CDFs) and 1989 and 1989 Update (incorporated by reference in Sec 63.1502).
Sec. 63.15.....	Availability of Information/ Confidentiality.	Yes.	.....

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## **IX. Halogenated Solvent MACT Chart**

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## **X. DNR Air Quality Policy 3-b-08, Opacity Limits**